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ABSTRACT

Provided is a listing of all National Science Foundation (NSF) program grants and contracts awarded in Fiscal Year 1982. The listing is organized by specific NSF programs within these areas: (1) mathematical and physical sciences; (2) engineering; (3) biological, behavioral, and social sciences; (4) astronomical, earth, and ocean sciences (includes Astronomy Research Centers and National Center for Atmospheric Research); (5) scientific, technological, and international affairs; (6) Ocean Drilling Program and United States Antarctic Research Program; (7) scientific and engineering personnel and education, and fellowships; (8) special foreign currency (includes scientific and technological information, scientific research, and international travel); and (9) graduate and minority graduate fellowships. Awards are arranged by state or country and, within each state or country, by institution. Information provided for each award includes principal investigator(s), project title, award number, project duration, and amount awarded. (JN)

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National Science Foundation

Grants and Awards for Fiscal Year 1982

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Cover: Sunlight shines on mirror of McMath Telescope at Kitt Peak National Observatory
in Arizona.

National Science Foundation

**Grants and Awards
for Fiscal Year 1982**

INTRODUCTION

This report is a listing of all NSF program grants and contracts awarded in Fiscal Year 1982 and is organized by NSF program. The awards are arranged by state or country and, within each state or country, by institution. A glossary at the end of the book lists institutions by cities.

An asterisk following the award number indicates that the project is funded by more than one NSF program or appropriation and may appear more than once in the report.

INCLUSION AND EXCLUSIONS

This report includes all grants and contracts funded from the National Science Foundation's Salaries and Expenses Appropriation and Special Foreign Currency Appropriation. The report generally excludes the following:

Transactions funded from Program Development and Management Funds (such as procurements for routine housekeeping activities).

Awards (or portions of awards) using funds transferred to NSF by other federal agencies.

Administrative transactions such as extensions of project duration or amendments to modify grant or contract terms which do not involve the obligation of FY 1982 funds.

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MATHEMATICAL AND PHYSICAL SCIENCES

CHEMISTRY

ALABAMA

AUBURN UNIVERSITY MAIN CAMPUS

SHEVLIN, PHILIP B; REACTIONS OF ATOMIC CARBON AND RELATED HIGH ENERGY INTERMEDIATES (CHEMISTRY) (CHE-810303) A01; 12 MONTHS \$41,000

LIVANT, PETER; BIS-TRIPTYCH COMPOUNDS. SYNTHESIS AND INVESTIGATION OF A NOVEL RING SYSTEM HAVING A COLINEAR B-N-B OR AL-N-AL ARRAY. POSSIBLE PRECURSORS TO HYPERVALENT NITROGEN (CHEMISTRY) (CHE-8204273) 12 MONTHS \$38,203

UNIVERSITY OF ALABAMA

ATWOOD, JERRY L; SYNTHETIC AND STRUCTURAL CHARACTERIZATION OF NOVEL COMPOUNDS THAT POSSESS METAL-CARBON SIGMA BONDS (CHE-8111137 A01; 12 MONTHS \$49,852

UNIVERSITY OF SOUTH ALABAMA

TOREN, E C; SELECTIVITY BY AND CHARACTERIZATION OF POST-COLUMN REACTION DETECTORS (CHE-8101123 A01; 12 MONTHS \$47,300

ARIZONA

ARIZONA STATE UNIVERSITY

LIN, SHENG H; INVESTIGATION OF THE MASTER EQUATION METHOD AND VIBRATIONAL RELAXATION IN ISOLATED MOLECULES (CHE-8007938 A01; 12 MONTHS \$28,000

MOORE, THOMAS A, AND BEHIN, DAVID; ENERGIES OF METASTABLE EXCITED STATES OF BIOMOLECULES DETERMINED BY PHOTOACOUSTIC SPECTROSCOPY. THE LOWEST EXCITED TRIPLET ENERGY OF CAROTENOID POLYENES (CHE-8021718 A01; 12 MONTHS \$30,385

UNIVERSITY OF ARIZONA

FELTHAM, ROBERT D; REACTIONS OF COORDINATED NITROGEN OXIDES (CHE-8000245 A02; 12 MONTHS \$51,000

BATES, ROBERT B; DELOCALIZED CARBANIONS IN SYNTHESIS (CHEMISTRY) (CHE-8015306 A02; 12 MONTHS \$34,500

ARMSTRONG, NEAL R; PHOTOELECTROCHEMICAL AND ELECTROCHROMIC REACTIONS AT CHEMICALLY-MODIFIED ELECTRODE SURFACES (CHE-8017571 A01; 12 MONTHS \$56,797

WILSON, GEORGE S; ANALYTICAL APPLICATIONS OF SEMI-SYNTHETIC BIOSURFACES (CHE-8022286 A01; 12 MONTHS \$48,880

HALL, HENRY K; SYNTHESIS AND REACTIVITY OF BIS-CYCLOPENTADIENYL BRIDGED DINUCLEAR TRANSITION METAL COMPLEXES (CHE-8102918 A01; 12 MONTHS \$43,500

ARKANSAS

UNIVERSITY OF ARKANSAS FAYETTEVILLE

FRY, ARTHUR, AND SIMS, LESLIE B; HEAVY ATOM ISOTOPE EFFECT STUDIES OF ORGANIC REACTION MECHANISMS (CHE-8016398 A01; 12 MONTHS \$89,000

GREEN, ROBERT B; LASER ENHANCED IONIZATION SPECTROMETRY (CHE-8105000; 12 MONTHS \$67,000

CALIFORNIA

AGOURON INSTITUTE

HAGLER, ARNOLD T; STRUCTURE, ENERGETICS, AND DYNAMICS OF ORGANIC MOLECULES: PEPTIDES (PCM-8204908*) 12 MONTHS \$15,000

CALIFORNIA INSTITUTE OF TECHNOLOGY

GRUBBS, ROBERT H; MECHANISMS OF TRANSITION METAL-CATALYZED REACTIONS OF HYDROCARBONS (CHE-8016528 A01; 12 MONTHS \$128,400

MARCUS, R DOLPH A; THEORETICAL STUDIES IN CHEMICAL KINETICS (CHE-8017046 A02; 12 MONTHS \$95,000

GODDARD, WILLIAM A; REACTION MECHANISMS FOR HOMOGENEOUS CATALYSIS (CHE-8017774 A01; 12 MONTHS \$69,697

DOUGHERTY, DENNIS A; NEW PERSISTENT BIRADICALS: DIRECT CHARACTERIZATION OF HIGHLY REACTIVE ORGANIC INTERMEDIATES (CHE-8024663 A01; 12 MONTHS \$48,700

GRAY, HARRY B; METALLOENZYME REDUCTION - OXIDATION MECHANISMS (CHE-8024863 A01; 12 MONTHS \$160,000

BERCAW, JOHN E; THE ACTIVATION OF MOLECULAR NITROGEN, CARBON MONOXIDE, AND HYDROCARBONS WITH ORGANOMETALLIC COMPOUNDS (CHE-8024869 A01; 12 MONTHS \$200,000

MCKOY, VINCENT; ELECTRON-MOLECULE AND ELECTRON-MOLECULAR ION SCATTERING CROSS SECTIONS AND RELATED PROCESSES (CHE-8040870 A02; 12 MONTHS \$62,100

MCKOY, VINCENT; ELECTRON-MOLECULE AND ELECTRON-MOLECULAR ION SCATTERING CROSS SECTIONS AND RELATED PROCESSES (CHE-8040870 A03; \$7,012

EVANS, DAVID A; STUDIES IN ORGANIC SYNTHESIS (CHE-8101742 A01; 12 MONTHS \$102,356

COLLINS, TERENCE J; NEW HIGH VALENT TRANSITION METAL COMPLEXES AS REAGENTS FOR ORGANIC SYNTHESIS (CHE-8107535 A01; 12 MONTHS \$49,700

DERVAN, PETER B; PERSISTENT DIAZENES AND OTHER REACTIVE INTERMEDIATES (CHEMISTRY) (CHE-8111197 A01; 12 MONTHS \$80,000

BALDESCHWIELER, JOHN D; NEW PHYSICAL METHODS FOR THE STUDY OF BIOLOGICAL SYSTEMS (CHEMISTRY) (CHE-8112589 A01; 6 MONTHS \$49,063

HAFF, PETER K, AND TOMBRELLO, THOMAS A; THE PHYSICS OF ION PROBES (CHE-8113273; 12 MONTHS \$85,300

GRAY, HARRY B; PHOTOCHEMISTRY OF METAL COMPLEXES (CHE-8120419; 12 MONTHS \$112,000

ROBERTS, JOHN D; NUCLEAR MAGNETIC RESONANCE SPECTROSCOPY, STRUCTURES AND REACTION MECHANISM OF ORGANIC COMPOUNDS (CHE-8120508; 12 MONTHS \$105,000

SIMON, BARRY M; MATHEMATICAL ATOMIC PHYSICS (MCS-8120833*; 12 MONTHS \$20,000

BERCAW, JOHN E; GROUP TRAVEL FOR U.S. PARTICIPANTS IN 3RD INTERNATIONAL SYMPOSIUM ON HOMOGENEOUS CATALYSIS, MILAN, ITALY, AUGUST 30 - SEPTEMBER 3, 1982 (CHE-8121760; 6 MONTHS \$22,444

JANDA, KENNETH C; PRODUCT STATE ANALYSIS OF INFRARED PHOTODISSOCIATION EXPERIMENTS (CHEMISTRY) (CHE-8202408; 12 MONTHS \$60,000

IRELAND, ROBERT E; THE TOTAL SYNTHESIS OF MACROLIDE ANTIBIOTICS (CHE-8203434; 12 MONTHS \$98,650

WEINBERG, W HENRY; CHEMISORPTION AND HETEROGENEOUS CATALYSIS OF HYDROCARBON MOLECULES UNDER WELL CHARACTERIZED CONDITIONS OVER GROUP VIII TRANSITION METAL SURFACES (CHEMISTRY) (CHE-8206487; 12 MONTHS \$165,000

ZEWAIL, AHMED H; HIGH-ENERGY VIBRATIONAL STATES OF LARGE MOLECULES: DYNAMICS AND SPECTRA (CHEMISTRY) (CHE-8211356; 12 MONTHS \$145,000

CALIFORNIA STATE UNIVERSITY, FULLERTON

FINLAYSON-PITTS, BARBARA; THE REACTION OF HYDROGEN ATOMS WITH OZONE (CHE-7920309 A02; 12 MONTHS \$41,000

CALIFORNIA STATE UNIVERSITY, LOS ANGELES

ONAK, THOMAS P; CARBORANE CHEMISTRY (CHE-8024115 A01; 12 MONTHS \$33,000

HARVEY MUDD COLLEGE

MYHRE, PHILIP C; INDUSTRIAL/UNIVERSITY COOPERATIVE PROGRAM: CARBON-13 NMR STUDIES OF CARBONIUM IONS IN THE SOLID STATE (CHE-8020743 A01*; 12 MONTHS \$32,534

SAN DIEGO STATE UNIVERSITY

COBBLE, JAMES W; CHEMICAL THERMODYNAMICS AND CHEMISTRY IN HIGH TEMPERATURE AQUEOUS SOLUTIONS (CHE-8120679; 12 MONTHS \$75,800

LAUB, RICHARD J; ANALYTICAL AND PHYSICO-CHEMICAL STUDIES BY GAS-LIQUID CHROMATOGRAPHY (CHE-8213624; 4 MONTHS \$14,000

SRI INTERNATIONAL

SMITH, GREGORY P, LAINE, RICHARD M, AND GOLDEN, DAVID M; BOND DISSOCIATION ENERGIES FROM GAS PHASE KINETICS STUDIES OF NEUTRAL TRANSITION METAL COMPLEXES AND ORGANOMETALLIC COMPOUNDS (CHE-7923569 A02; 12 MONTHS \$85,000

COSBY, PHILIP C; PHOTOFRAGMENT SPECTROSCOPY OF MOLECULAR IONS (CHEMISTRY) (CHE-8015360 A01; 12 MONTHS \$38,000

BECKER, CHRISTOPH H; GAS-LIQUID SURFACE INTERACTIONS OBSERVED AND STIMULATED BY LASERS (CHEMISTRY) (CHE-8113676 A01; 12 MONTHS \$56,200

STANFORD UNIVERSITY

COLLMAN, JAMES P; SYNTHETIC STUDIES IN HOMOGENEOUS CATALYSIS (CHE-7809443 A04; 12 MONTHS \$170,000

BRAUMAN, JOHN I; GAS-PHASE IONIC CHEMISTRY AND SPECTROSCOPY (CHE-7821064 A03; 12 MONTHS \$160,000

VAN TAMELEN, EUGENE E; BIOGENESIS AND BIOGENETICALLY-PATTERNED SYNTHESIS OF NATURAL PRODUCTS AND RELATED SUBSTANCES (CHE-8002661 A02; 12 MONTHS \$72,500

JOHNSON, WILLIAM S. SYNTHETIC STUDIES RELATED TO NATURAL PRODUCTS (CHE-8004113 A02); 12 MONTHS \$105,056
ZARE, RICHARD N. CHEMISTRY OF EXCITED MERCURY ATOMS (CHE-8006524 A02); 12 MONTHS \$143,769

ROSS, JOHN. THEORY AND EXPERIMENTS ON IRREVERSIBLE CHEMICAL PROCESSES (CHE-8017231 A02); 12 MONTHS \$57,003

DIERASSI, CARL. CIRCULAR DICHROISM OF CYCLIC KETONES. CONFORMATIONAL ISOTOPE EFFECTS (CHEMISTR?) (CHE-8025733 A01); 12 MONTHS \$68,000

ANDERSEN, HANS C. STATISTICAL MECHANICS OF CONDENSED PHASES (CHEMISTRY) (CHE-8107165 A01); 14 MONTHS \$71,665

ZARE, RICHARD N. STATE SELECTION AND STATE DETECTION OF MOLECULES WITH LASERS (CHE-8108823 A01); 12 MONTHS \$224,484

COLLMAN, JAMES P. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH PROJECT: REVERSIBLE OXYGEN ELECTRODE. COLLABORATIVE SEARCH FOR NEW CATALYSTS AND PHYSICAL TEXTURES (CHE-8110545 A01*); 12 MONTHS \$150,000

WENDER, PAUL A. APPROACHES TO IMPROVED SYNTHESIS DESIGN: MECHANISTIC AND SYNTHETIC STUDIES ON NEW ANNELATION METHODS (CHE-8117646 A01); \$4,616

BRAUMAN, JOHN I. PURCHASE OF A RESONANCE RAMAN SPECTROMETER FOR CHEMICAL RESEARCH (CHE-8119628); 12 MONTHS \$100,000

BRAUMAN, JOHN I. PURCHASE OF INSTRUMENTATION FOR BIOINORGANIC AND ORGANIC CHEMISTRY USING MAGNETIC CIRCULAR DICHROISM SPECTROSCOPY (CHE-8120761); 12 MONTHS \$80,000

PECORA, ROBERT. THEORETICAL AND EXPERIMENTAL STUDIES OF THERMAL MOTIONS IN LIQUIDS AND POLYMER SYSTEMS (CHEMISTRY) (CHE-8200512*); 12 MONTHS \$68,000

SOLOMON, EDWARD I. SPECTROSCOPIC STUDIES OF ELECTRONIC STRUCTURE ANALOGUES OF METALLOPROTEIN ACTIVE SITES (CHE-8204841*); 12 MONTHS \$57,000

TAUBE, HENRY. OXIDATION-REDUCTION MECHANISMS (CHEMISTRY) (CHE-8211275); 13 MONTHS \$153,300

UNIVERSITY OF CALIFORNIA, BERKELEY

MUETTERTIES, EARL L. EXPLORATORY AND FUNDAMENTAL STUDIES IN COORDINATION AND COORDINATION CATALYSIS (CHE-7903933 A02); 12 MONTHS \$189,350

MOORE, C. BRADLEY. KINETICS AND SPECTROSCOPY OF DYNAMIC INTERMEDIATES (CHE-7918027 A02); 12 MONTHS \$46,575

TEMPLETON, DAVID H. ANOMALOUS SCATTERING OF SYNCHROTRON RADIATION (CHE-7919532 A02); 12 MONTHS \$45,000

MILLER, WILLIAM H. THEORY OF CHEMICAL DYNAMICS (CHE-7920181 A02); 12 MONTHS \$110,125

BERGMAN, ROBERT G. ORGANIC AND ORGANOMETALLIC CHEMISTRY (CHE-7926291 A02); 9 MONTHS \$92,700

MUETTERTIES, EARL L. COORDINATION CHEMISTRY OF CORAL AND IRON GROUP METAL SURFACES (CHE-8000038 A01); 12 MONTHS \$47,000

MUETTERTIES, EARL L. COORDINATION CHEMISTRY OF CORAL AND IRON GROUP METAL SURFACES (CHE-8000038 A01); 12 MONTHS \$23,704

SCHAEFER, HENRY F. ELECTRONIC THEORY OF SIMPLE CHEMICAL REACTIONS (CHE-8009320 A02); 12 MONTHS \$91,414

HARRIS, CHARLES B. ENERGY TRANSFER PROCESSES AND COHERENCE IN CONDENSED PHASE (CHE-8016891 A01); 12 MONTHS \$72,500

STRAUSS, HERBERT L. DYNAMICAL PROCESSES BY VIBRATIONAL SPECTROSCOPY (CHE-8022216 A01); 12 MONTHS \$135,136

DAUBEN, WILLIAM G. STRUCTURAL STUDIES IN ALCYCLIC SYSTEMS (CHEMISTRY) (CHE-8102938 A01); 12 MONTHS \$98,275

PRATT, LAWRENCE R. THEORY OF ASSOCIATED MOLECULAR LIQUIDS, AND THEORY OF MICELLE STRUCTURE AND STABILITY (CHEMISTRY) (CHE-8111104 A01); 12 MONTHS \$37,500

MATHIES, RICHARD A. VISIBLE AND ULTRAVIOLET RAMAN STUDIES OF EXCITED STATES IN PROTEINS (CHE-8116042 A01*); 12 MONTHS \$60,082

MATHIES, RICHARD A. VISIBLE AND ULTRAVIOLET RAMAN STUDIES OF EXCITED STATES IN PROTEINS (CHEMISTRY) (CHE-8116042 A02); \$8,049

HEATHCOCK, CLAYTON H. GENERAL METHODS FOR ALKALOID SYNTHESIS (CHE-8120864); 12 MONTHS \$82,653

VOLLHARDT, K. PETER C. TRANSITION METAL AND HEAT MEDIATED ORGANIC TRANSFORMATIONS (CHE-8200049); 12 MONTHS \$60,704

TINOCO, IGNACIO. PURCHASE OF A HIGH RESOLUTION MASS SPECTROMETER FOR STRUCTURAL STUDIES IN ORGANIC, ORGANOMETALLIC AND INORGANIC CHEMISTRY (CHE-8200233); 12 MONTHS \$260,000

STRETTWIESSER, ANDREW. CARBON ACIDITY (CHEMISTRY) (CHE-8205696); 9 MONTHS \$71,700

HARRIS, ROBERT A. I. DENSITY FUNCTIONAL THEORY II. PARITY VIOLATING EFFECTS IN CHIRAL MOLECULES (CHEMISTRY) (CHE-8206823); 12 MONTHS \$43,568

SAYKALLY, RICHARD J. INFRARED LASER SPECTROSCOPY OF TRANSIENT SPECIES (CHEMISTRY) (CHE-8207307); 12 MONTHS \$182,332

TINOCO, IGNACIO. PURCHASE OF A NUCLEAR MAGNETIC SPECTROMETER (CHEMISTRY) (CHE-8209580); 12 MONTHS \$37,500

UNIVERSITY OF CALIFORNIA, DAVIS

BALCH, ALAN L. CHEMICAL AND PHYSICAL STUDIES OF POLYNUCLEAR METAL COMPLEXES (CHE-7924575 A02); 12 MONTHS \$36,300

KEIZER, JOEL E. THEORY OF SPATIAL AND TEMPORAL CORRELATIONS IN NONEQUILIBRIUM THERMODYNAMICS (CHEMISTRY) (CHE-8009816 A02); 12 MONTHS \$50,000

MUSKER, W. KENNETH. THE CHEMISTRY OF THIOETHERS: CATIONS AND COPPER COMPLEXES (CHE-8015489 A01); 12 MONTHS \$35,000

LA MAR, GERT N. PARAMAGNETIC-INDUCED NUCLEAR RELAXATION AS A STRUCTURAL PROBE IN SOLUTION (CHEMISTRY) (CHE-8108766 A01*); 12 MONTHS \$25,000

POWER, PHILIP P. SYNTHESIS OF TRANSITION METAL PHOSPHIDO AND PHOSPHINIDINE COMPLEXES AND TRANSITION METAL PHOSPHORUS CLUSTERS (CHE-8116355); 12 MONTHS \$32,981

CASE, DAVID A. RELATIVISTIC ELECTRONIC STRUCTURE CALCULATIONS IN THE MULTIPLE-SCATTERING APPROXIMATION (CHEMISTRY) (CHE-8117101); 12 MONTHS \$30,000

SMITH, KEVIN M. SYNTHESIS AND METABOLISM OF CHLOROPHYLLS (CHEMISTRY) (CHE-8120891); 12 MONTHS \$57,506

ZWEIFEL, GEORGE. SYNTHETIC INTERMEDIATES DERIVED FROM ORGANOBORON AND ORGANOALUMINUM COMPOUNDS (CHE-8205954); 12 MONTHS \$34,388

ROSENFELD, ROBERT N. THE SPECTROSCOPY AND DYNAMICS OF REACTIVE INTERMEDIATES IN THE GAS PHASE (CHEMISTRY) (CHE-8206897); 10 MONTHS \$70,000

MAKL, AUGUST H. MICROWAVE-OPTICAL STUDIES OF EXCITED ELECTRONIC STATES (CHEMISTRY) (CHE-8207263); 12 MONTHS \$50,000

TRUE, NANCY S. NMR SPECTROSCOPY OF LOW PRESSURE GASES (CHEMISTRY) (CHE-8210844); 12 MONTHS \$57,492

UNIVERSITY OF CALIFORNIA, IRVINE

LEE, EDWARD K. C. ELECTRONICALLY EXCITED MOLECULES (CHE-7925451 A02); 12 MONTHS \$71,500

MCIVER, ROBERT T. THERMOCHEMICAL AND DYNAMIC PROPERTIES OF NEGATIVE IONS AND FREE RADICALS (CHE-8024269 A01); 12 MONTHS \$64,000

MOORE, HAROLD W. SYNTHETIC AND MECHANISTIC STUDIES UTILIZING VINYL AZIDES (CHE-8025567 A01); 12 MONTHS \$54,429

TAFT, ROBERT W. ENERGETICS OF SUBSTITUENT AND SOLVENT EFFECTS. PROTONIC ACIDITIES AND BASICITIES (CHE-8118012); 12 MONTHS \$59,000

OVERMAN, LARRY E. NEW REACTIONS FOR ORGANIC SYNTHESIS (CHE-8203366); 12 MONTHS \$96,389

HEHRE, WARREN J. THERMOCHEMICAL STABILITIES OF TRANSIENT NEUTRAL MOLECULES BY ION CYCLOTRON RESONANCE SPECTROSCOPY (CHEMISTRY) (CHE-8210839); 16 MONTHS \$63,900

EVANS, WILLIAM J. SYNTHESIS AND CHEMICAL REACTIVITY OF LANTHANIDE METALS WITH UNSATURATED ORGANIC SUBSTRATES (CHEMISTRY) (CHE-8214612); 12 MONTHS \$56,000

UNIVERSITY OF CALIFORNIA, LOS ANGELES

FRIEDLANDER, SHELDON K. GIFFIN, CHARLES E. SINHA, MAHADEVA P. AND VILKER, VINCENT L. PARTICLE ANALYSIS BY MASS SPECTROMETRY (PAMS) (CPE-8008686 A01*); 12 MONTHS \$0,000

HELLER, ERIC J. INTRAMOLECULAR DYNAMICS AND SPECTROSCOPY (CHE-8016908 A01); 12 MONTHS \$83,000

FOOTE, CHRISTOPH S. CHEMISTRY OF SINGLET OXYGEN (CHE-8020140 A01); 12 MONTHS \$73,700

MURDOCH, JOSEPH R. A 'MOLECULAR CLOCK' AS A PROBE FOR THE LIFETIME OF A REACTIVE INTERMEDIATE (CHE-8021070 A01); 12 MONTHS \$43,000

KNOBLER, CHARLES M. LIQUID CRYSTAL PHASE TRANSITIONS: FREEZING AND MOLECULAR SHAPE EFFECTS (CHE-8024270 A01); 12 MONTHS \$62,000

SCOTT, ROBERT L. LIQUIDS AND SOLUTIONS (CHE-8100125 A01); 12 MONTHS \$57,000

KIVELSON, DANIEL. EXPERIMENTAL AND THEORETICAL STUDIES OF MOLECULAR MOTIONS IN LIQUIDS (CHEMISTRY) (CHE-8109068 A01); 14 MONTHS \$109,956

GRAM, DONALD J. STRUCTURAL RECOGNITION IN COMPLEXATION OF ORGANIC COMPOUNDS (CHE-8109532 A01); 12 MONTHS \$111,700

CHAPMAN, ORVILLE L. SYNTHESIS AND CHARACTERIZATION OF REACTIVE MOLECULES (CHE-8111194 A01); 12 MONTHS \$116,500

KAESZ, HERBERT D. STUDIES ON THE SYNTHESIS, CHARACTERIZATION AND CATALYTIC PROPERTIES OF TRANSITION METAL CLUSTER COMPLEXES (CHE-8111232 A01); 12 MONTHS \$106,000

REISS, HOWARD. NUCLEATION AND GROWTH APPLIED TO THE DETECTION AND AMPLIFICATION OF CHEMICAL PHYSICAL PHENOMENA (CHE-8112658 A01); 4 MONTHS \$19,800

STEVENS, ROBERT V. STUDIES ON THE SYNTHESIS OF CORRINS AND RELATED LIGANDS (CHE-8115444 A01); 12 MONTHS \$113,661

EL-SAYED, MOSTAFA A. MOLECULAR MULTIPHOTON IONIZATION AND MULTIPHOTON ELECTRONIC DISSOCIATION (CHE-8118011); 12 MONTHS \$60,000

KNOBLER, CHARLES M. DYNAMICS AND INTERACTIONS IN CONDENSED SYSTEMS (CHE-8118257); 12 MONTHS \$95,000

ZINK, JEFFREY I. TRANSITION METAL AND ORGANOMETALLIC PHOTOCHEMISTRY (CHE-8120185); 12 MONTHS \$53,200

HAWTHORNE, M. FREDERICK. CATALYSIS BY METALLOCARBORANES (CHE-8120298); 12 MONTHS \$130,000

BAYES, KYLE D. HYDROCARBON RADICAL OXIDATIONS STUDIED BY PHOTONIZATION MASS SPECTROMETRY (CHE-8120834); 12 MONTHS \$56,000

WILLIAMS, R. STANLEY. ION SCATTERING SPECTROSCOPY FOR SURFACE STRUCTURE ANALYSIS (DMR-8204358*); 12 MONTHS \$35,000

VALENTINE, JOAN S. METAL ION ACTIVATION OF OXYGEN (CHEMISTRY) (CHE-8204859); 12 MONTHS \$129,610

STROUSE, CHARLES E. CHEMICAL EQUILIBRIA IN THE SOLID STATE (CHE-8205485); 12 MONTHS \$66,000

TRUEBLOOD, KENNETH N. AND CRAM, DONALD J.; STRUCTURES OF AND ENERGY CALCULATIONS FOR HOST-GUEST COMPLEXES AND SPHERANES (CHEMISTRY) (CHE-8205803); 12 MONTHS \$26,000

REISS, HOWARD; STUDIES IN IDEALIZED SYSTEMS: 1) STATISTICAL MECHANICS AND KINETICS OF COOPERATIVE SYSTEMS; 2) NEGLECTED PROBLEMS OF TRANSPORT IN ION EXCHANGE MEMBRANES (CHEMISTRY) (CHE-8307432); 12 MONTHS \$85,000

KNOBLER, CHARLES M.; NONEQUILIBRIUM AND EQUILIBRIUM STATES IN FLUID MIXTURES (CHEMISTRY) (CHE-8210286); 12 MONTHS \$95,507

UNIVERSITY OF CALIFORNIA, RIVERSIDE

SAWYER, DONALD T.; ELECTROCHEMICAL AND SPECTROSCOPIC STUDIES OF METALLOPROTEIN MODEL COMPLEXES AND OF OXYGEN ACTIVATION IN APROTIC MEDIA (CHE-7929040 A02); 12 MONTHS \$100,000

FITTS, JAMES N.; KINETIC, SPECTROSCOPIC AND PHOTOCHEMICAL STUDIES OF RADICALS AND MOLECULES IN THE GAS PHASE AND ON SURFACES (CHE-7927133 A02); 12 MONTHS \$63,300

RETTIG, MICHAEL F.; PURCHASE OF WIDE BORE NUCLEAR MAGNETIC RESONANCE SPECTROMETER (CHEMISTRY) (CHE-8203497); 12 MONTHS \$175,000

WILKINS, CHARLES L.; COMPUTER-ASSISTED CHEMICAL ANALYSIS (CHE-8208073); 12 MONTHS \$84,631

UNIVERSITY OF CALIFORNIA, SAN DIEGO-SCRIPPS INSTITUTION OF OCEANOGRAPHY

FENICAL, WILLIAM H.; CHEMICAL DEFENSE IN MARINE ORGANISMS (CHE-8111907*); 12 MONTHS \$30,950

FAULKNER, D JOHN; CHEMICAL ECOLOGY OF MARINE ORGANISMS (CHEMISTRY) (CHE-8121471*); 12 MONTHS \$17,870

UNIVERSITY OF CALIFORNIA, SAN DIEGO

GOODMAN, MURRAY; SYNTHESIS, CONFORMATIONAL ANALYSIS AND PROPERTIES OF SEQUENTIAL POLYDEPSIPEPTIDES (CHE-8023002 A01*); 12 MONTHS \$40,000

MAGDE, DOUGLAS; PRIMARY PROCESSES IN THE PHOTOCHEMISTRY OF COORDINATION COMPOUNDS (CHEMISTRY) (CHE-8106367 A02); 12 MONTHS \$50,000

SCHRAUZER, GERHARD N.; NEW ORGANOMOLYBDENUM CHEMISTRY (CHE-8109524 A01); 12 MONTHS \$65,300

PERRIN, CHARLES L.; NMR STUDIES ON PROTON EXCHANGE IN AMIDES AND RELATED COMPOUNDS (CHE-8116300); 12 MONTHS \$60,000

WHEELER, JOHN C.; PHASE TRANSITIONS AND CRITICAL PHENOMENA IN MULTICOMPONENT SYSTEMS (CHE-8119247); 12 MONTHS \$80,000

WILSON, KENT R.; MOLECULAR DYNAMICS OF CHEMICAL REACTIONS IN SOLUTION (CHE-8120004); 12 MONTHS \$68,500

PERRIN, CHARLES L.; MECHANISMS OF HEME CATALYZED OXIDATIONS AND ARENE METAL EXCHANGE REACTIONS (CHE-8120969); 12 MONTHS \$102,000

VOLD, ROBERT L. AND VOLD, REUTZE R.; STUDIES OF MOLECULAR DYNAMICS BY NUCLEAR MAGNETIC RELAXATION IN COUPLED SPIN SYSTEMS (CHE-8122097); 12 MONTHS \$134,691

SHULER, KURT E.; STUDIES IN NONLINEAR STOCHASTIC PROCESSES (CHE-8206582); 6 MONTHS \$15,894

UNIVERSITY OF CALIFORNIA, SAN FRANCISCO

KOLLMAN, PETER A.; AN APPROACH TO DEVELOPING ANALYTICAL POTENTIAL FUNCTIONS FOR NON-COVALENT INTERACTIONS (CHEMISTRY) (CHE-8026560 A01); 12 MONTHS \$45,000

UNIVERSITY OF CALIFORNIA, SANTA BARBARA

LITTLE, R. D.; MICHAEL INITIATED RING CLOSURE REACTIONS (CHEMISTRY) (CHE-8005371 A02); 12 MONTHS \$27,000

MARTIN, RICHARD M. AND METTU, HORIA I.; SURFACE METASTABLE QUENCHING SPECTROSCOPY (CHEMISTRY) (CHE-8007043 A02); 12 MONTHS \$67,000

BOWERS, MICHAEL T.; MECHANISMS OF GAS PHASE ION MOLECULE REACTIONS (CHE-8020464 A01); 12 MONTHS \$100,900

BUNTON, CLIFFORD A.; QUANTITATIVE TREATMENTS OF CATALYSIS BY NONFUNCTIONAL AND FUNCTIONAL MICELLES (CHE-8106777); 12 MONTHS \$67,400

FORD, PETER C.; PHOTOCHEMICAL REACTION MECHANISMS OF TRANSITION METAL COMPLEXES (CHE-8120266); 12 MONTHS \$74,800

HARRIS, DAVID O.; PURCHASE OF INSTRUMENTATION FOR LASER FLASH PHOTOLYSIS STUDIES OF TRANSITION METAL COMPLEXES (PHOTOCHEMISTRY) (CHE-8122110); 12 MONTHS \$60,000

HUBBARD, ARTHUR T.; ELECTROCHEMISTRY OF WELL-DEFINED SURFACES (CHEMISTRY) (CHE-8205799); 12 MONTHS \$122,224

UNIVERSITY OF CALIFORNIA, SANTA CRUZ

BUNNETT, JOSEPH F.; AROMATIC NUCLEOPHILIC SUBSTITUTION REACTIONS (CHEMISTRY) (CHE-7927119 A02); 12 MONTHS \$73,500

BERNASCONI, CLAUDE F.; ELEMENTARY STEPS IN THE NUCLEOPHILIC ADDITION TO OLEFINS (CHE-8024361 A01); 12 MONTHS \$74,000

UNIVERSITY OF SOUTHERN CALIFORNIA

BENSON, SIDNEY W.; THE KINETICS AND THERMOCHEMISTRY OF SOME IMPORTANT ATOM AND FREE RADICAL REACTIONS (CHE-7826683 A02); 12 MONTHS \$97,600

OLAH, GEORGE A.; IONIC ORGANIC REACTIONS AND THEIR INTERMEDIATES (CHE-7924387 A02); 12 MONTHS \$63,924

STEPHENSON, LEONARD M.; MECHANISMS OF HYDROCARBON FUNCTIONALIZATION REACTIONS AND METAL-CATALYZED DIENE OLIGOMERIZATION (CHEMISTRY) (CHE-8012253 A02); 12 MONTHS \$75,000

FLOOD, THOMAS C.; STEREOCHEMISTRY AND MECHANISM IN ORGANOTRANSITION METAL CHEMISTRY (CHE-8016573 A02); 12 MONTHS \$47,400

ADAMSON, ARTHUR W.; PHOTOCHEMISTRY OF COORDINATION COMPOUNDS (CHEMISTRY) (CHE-8024681 A01); 12 MONTHS \$71,000

REED, C A.; SYNTHETIC COORDINATION CHEMISTRY (CHE-8026812 A01); 12 MONTHS \$61,000

BAU, ROBERT; STRUCTURAL STUDIES ON METAL HYDRIDE CLUSTERS AND OTHER TRANSITION METAL COMPLEXES (CHE-8101122 A01); 12 MONTHS \$70,000

SEGAL, GERALD A.; THEORETICAL STUDIES ON THE ELECTRONIC STATES OF MOLECULES (CHEMISTRY) (CHE-8106016 A01); 12 MONTHS \$54,548

ADAMSON, ARTHUR W.; THE PHYSICALLY ADSORBED STATE (CHEMISTRY) (CHE-8200632); 12 MONTHS \$60,000

BEAUDET, ROBERT A.; PURCHASE OF A MULTINUCLEAR FOURIER TRANSFORM NUCLEAR MAGNETIC RESONANCE SPECTROMETER FOR USE IN RESEARCH IN CHEMISTRY (CHE-8201966); 12 MONTHS \$466,000

GOODMAN, MYRON F.; LASER-INDUCED CHEMISTRY AND INTRAMOLECULAR VIBRATIONAL RELAXATION POLYATOMICS: A THEORETICAL STUDY (CHEMISTRY) (CHE-8203966); 12 MONTHS \$61,200

DALTON, LARRY R.; DEVELOPMENT OF SATURATION TRANSFER & TIME RESOLVED TECHNIQUES & THEIR APPLICATION TO THE HYDRODYNAMIC CHARACTERIZATION OF PROTEINS & SUPRAMOLECULAR COMPLEXES (CHEMISTRY) (CHE-8206112*); 12 MONTHS \$35,359

TAYLOR, HOWARD S.; THE INTERACTION OF ELECTRONS WITH ATOMS AND MOLECULES: FUNDAMENTAL THEORIES AND PROCESSES (CHEMISTRY) (CHE-8207152); 12 MONTHS \$84,999

UNIVERSITY OF THE PACIFIC

WULFMAN, CARL E.; APPROXIMATE DYNAMICAL SYMMETRIES OF SMALL MOLECULES (CHE-8014165 A01); 12 MONTHS \$31,927

COLORADO

COLORADO STATE UNIVERSITY

STILLE, JOHN K.; HOMOGENEOUS PALLADIUM CATALYZED COUPLING REACTIONS (CHE-8003336 A02); 12 MONTHS \$86,814

LADANYI, BRANKA M.; THEORY OF OPTICAL RESPONSE OF FLUIDS (CHEMISTRY) (CHE-8007472 A02); 12 MONTHS \$35,000

HEGEDUS, LOUIS S.; ORGANIC SYNTHESIS VIA TRANSITION METAL COMPLEX CHEMISTRY (CHE-8200522); 12 MONTHS \$53,151

MEYERS, ALBERT I.; FORMAMIDINES: REAGENTS FOR CHIRAL AND ACHIRAL C-C BONDS ALPHA TO THE AMINO GROUP (CHE-8200817); 12 MONTHS \$73,937

NORTON, JACK R.; MECHANISMS OF CHEMICAL REACTIONS INVOLVED IN CATALYSIS BY ORGANOMETALLIC COMPLEXES IN SOLUTION (CHEMISTRY) (CHE-8207597); 12 MONTHS \$120,000

LEYDEN, I. W. AND E. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH PROJECT: CHEMICAL AND SPECTROSCOPIC CHARACTERIZATION OF MODIFIED SURFACES (CHE-8210014*); 4 MONTHS \$54,045

FORT LEWIS COLLEGE

ESTLER, RON C.; LASER-INDUCED FLUORESCENCE STUDIES OF THE DYNAMICS OF ALKALINE EARTH-HYDROGEN HALIDE REACTIONS (CHEMISTRY) (CHE-8214169); 12 MONTHS \$45,253

UNIVERSITY OF COLORADO AT BOULDER

LINEBERGER, W. CARL; NEGATIVE ION SPECTROSCOPY (CHE-7818424 A02); 12 MONTHS \$95,030

LEONE, STEPHEN R.; LASER STATE SELECTED KINETICS (CHE-7911340 A02); 12 MONTHS \$58,000

WALBA, DAVID M.; THE STEREOSPECIFIC OXIDATIVE CYCLIZATIONS PROMOTED BY HIGH VALENT OXO TRANSITION METAL SPECIES (CHEMISTRY) (CHE-8011391 A02); 12 MONTHS \$27,793

REINHARDT, WILLIAM P.; THEORY OF MANY-BODY PROCESSES IN CHEMICAL PHYSICS (CHE-8011442 A02); 12 MONTHS \$70,000

CRISTOL, STANLEY J.; THE NATURE OF INTERMEDIATES IN CHEMICAL AND PHOTOCHEMICAL PROCESSES (CHE-8011933 A01); 12 MONTHS \$68,500

GILL, STANLEY J.; CALORIMETRIC MEASUREMENT OF DISSOLUTION OF HYDROPHOBIC GASES INTO WATER (CHE-8018630 A02); 12 MONTHS \$40,000

RAKOWSKI-DUBOIS, MARY C.; SYNTHETIC AND MECHANISTIC STUDIES OF METAL SULFUR COMPLEXES (CHE-8106790 A01); 12 MONTHS \$49,395

HYNES, JAMES T.; THEORETICAL STUDIES OF CHEMICAL REACTIONS IN LIQUIDS (CHEMISTRY) (CHE-8119240 A01); 14 MONTHS \$76,000

DEPUY, CHARLES H. AND BIERBAUM, VERONICA M.; FLOWING AFTERGLOW AND SIFT-DRIFT STUDIES OF GAS PHASE ION-MOLECULE REACTIONS (CHEMISTRY) (CHE-8203110); 12 MONTHS \$76,000

KOVAL, CARL A.; SYNTHESIS AND KINETICS OF CHEMICALS THAT EXHIBIT UNUSUALLY SLOW ELECTRON TRANSFER REACTIVITY (CHE-8204000); 12 MONTHS \$67,000

CONNECTICUT

UNIVERSITY OF CONNECTICUT

EPLING, GARY A. AND SRINIVASAN, R.; INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: PHOTOCHEMISTRY FROM HIGHER EXCITED STATES OF 1,4-DIENES AND ALLYL-CYCLOPROPANES (CHEMISTRY) (CHE-8015355 A03*); 12 MONTHS \$27,700

SUIB, STEVEN L.; PHOTOCHEMICAL AND SPECTROSCOPIC STUDIES OF URANYL-EXCHANGED ZEOLITES (CHEMISTRY) (CHE-8204417); 12 MONTHS \$62,000

WESLEYAN UNIVERSITY

JACOBI, PETER A.; A SYNTHETIC APPROACH TO THE HIGHLY OXYGENATED SESQUITERPENES (CHE-8108984 A01); 12 MONTHS \$41,500

KOHLER, BRYAN E. MOLECULAR SPECTROSCOPY. HIGH RESOLUTION STUDIES OF SIMPLE POLYENES (CHE-8118370; 12 MONTHS \$62,114)

YALE UNIVERSITY

SAUNDERS, MARTIN. STABLE SOLUTIONS OF CARBONIUM IONS. ISOTOPIC PERTURBATION FOR DETERMINING MOLECULAR SYMMETRY (CHE-8000250 A02; 12 MONTHS \$68,900)

BERSON, JEROME A. STRAINED RINGS, BIRADICALS, AND HIGH-SPIN ORGANIC MOLECULES (CHEMISTRY) (CHE-8011399 A02; 9 MONTHS \$85,000)

COLSON, STEVEN D. AND WIBERG, KENNETH B. INFRARED SPECTRA OF ISOLATED MOLECULES AT LOW TEMPERATURES (CHEMISTRY) (CHE-8017304 A02; 12 MONTHS \$41,900)

ADAMS, RICHARD D. SYSTEMATICS OF THE SYNTHESIS AND REACTIVITY OF HETERONUCLEAR CLUSTER COMPOUNDS (CHE-8019041 A01; 12 MONTHS \$33,731)

KEYES, THOMAS F. PROBLEMS IN STATISTICAL MECHANICS (CHEMISTRY) (CHE-8111422 A01; 12 MONTHS \$54,632)

DANISHEFSKY, SAMUEL. PURCHASE OF LASER SPECTROSCOPY EQUIPMENT TO STUDY PHOTOCHEMISTRY AND PHOTOPHYSICS (CHE-8120851; 12 MONTHS \$115,000)

WIBERG, KENNETH B. PROPERTIES OF GEOMETRICALLY DISTORTED ORGANIC COMPOUNDS (CHEMISTRY) (CHE-8121421; 12 MONTHS \$121,900)

CROSS, R. AND SAUNDERS, MARTIN. MOLECULAR-BEAM STUDIES OF ORGANIC REACTIONS (CHEMISTRY) (CHE-8201164; 12 MONTHS \$77,857)

CRABTREE, ROBERT H. ALKANE ACTIVATION WITH IRIUM COMPLEXES (CHE-8204984; 12 MONTHS \$50,000)

FALLER, J. W. REACTIONS AND STEREOCHEMISTRY OF ORGANOMETALLIC COMPOUNDS RELATED TO ASYMMETRIC SYNTHESIS AND CATALYTIC ACTIVITY (CHE-8208042; 12 MONTHS \$65,100)

DELAWARE

UNIVERSITY OF DELAWARE

KWART, HAROLD. TRANSITION STATE STRUCTURE IN ORGANIC OXIDATION AND REDUCTION PROCESSES THROUGH THE TEMPERATURE DEPENDENCE OF THE PRIMARY KINETIC ISOTOPE EFFECT (CHE-7911110 A02; 12 MONTHS \$40,100)

HECK, RICHARD F. SUBSTITUTION REACTIONS BY ORGANOTRANSITION METAL COMPOUNDS AT UNSATURATED CARBON (CHE-8006319 A02; 12 MONTHS \$54,000)

WOOD, ROBERT H. INTERACTIONS OF SALTS AND NONELECTROLYTES IN AQUEOUS SOLUTIONS (CHEMISTRY) (CHE-8009672 A02; 15 MONTHS \$98,000)

RECHNITZ, GARRY A. BIOSELECTIVE MEMBRANE ELECTRODE (CHE-8025625 A01; 12 MONTHS \$76,081)

RIDGE, DOUGLAS P. CHEMICAL AND PHYSICAL INTERACTIONS OF METAL IONS WITH ORGANIC MOLECULES IN THE GAS PHASE (CHE-8110516 A01; 12 MONTHS \$51,500)

WETLAUFER, DONALD B. PURCHASE OF AN X-RAY DIFFRACTOMETER AND STRUCTURE SOLUTION PACKAGE (CHEMISTRY) (CHE-8205589; 12 MONTHS \$80,000)

DISTRICT OF COLUMBIA

GEORGETOWN UNIVERSITY

MARTIRE, DANIEL E. BASIC ANALYTICAL, THERMODYNAMIC AND THEORETICAL STUDIES INVOLVING GAS AND LIQUID CHROMATOGRAPHY (CHE-7919322 A02; 12 MONTHS \$99,650)

POPE, MICHAEL T. STRUCTURES AND PROPERTIES OF MIXED METAL HETEROPOLY ANIONS (CHEMISTRY) (CHE-8019039 A02; 12 MONTHS \$40,000)

ARMSTRONG, DANIEL W. PSEUDOPHASE LIQUID CHROMATOGRAPHY (CHE-8119055; 12 MONTHS \$55,000)

ARMSTRONG, DANIEL W. PSEUDOPHASE LIQUID CHROMATOGRAPHY (CHE-8119055 A01; \$13,453)

HOWARD UNIVERSITY

HUDRLIK, PAUL F. ORGANOSILICON COMPOUNDS IN STEREOSPECIFIC SYNTHESIS (CHE-7926181 A02; 12 MONTHS \$71,912)

JACKSON, WILLIAM M. CONFERENCE ON LASERS AS REACTANTS AND PROBES IN CHEMISTRY, WASHINGTON, D.C., MAY 12-14, 1982 (CHE-8204838; 6 MONTHS \$10,000)

NATIONAL ACADEMY OF SCIENCES-NATIONAL RESEARCH COUNCIL
SPINDEL, WILLIAM. SUPPORT OF THE STANDING COMMITTEE ON CHEMICAL SCIENCES (CHE-8120286; 12 MONTHS \$25,000)

FLORIDA

FLORIDA STATE UNIVERSITY

WALBORSKY, HARRY M. THE SYNTHESIS AND CHIROPTICAL PROPERTIES OF ACYCLIC CHIRAL, 1,3-DIENES AND ALPHA, BETA-UNSATURATED ALDEHYDES (CHE-8021072 A01; 12 MONTHS \$33,000)

DETAR, DELOS F. QUANTITATIVE CALCULATION OF STERIC EFFECTS (CHE-8022534 A01; 12 MONTHS \$65,600)

SALTIEL, JACK. MECHANISMS OF PHOTOCHEMICAL REACTIONS (CHE-8026701 A01; 12 MONTHS \$58,100)

UNIVERSITY OF FLORIDA

MICHA, DAVID A. MANY-BODY COLLISION PROCESSES IN MOLECULAR SYSTEMS (CHE-8019510 A01; 12 MONTHS \$49,965)

PERSON, WILLIS B. UNDERSTANDING INFRARED INTENSITIES (CHEMISTRY) (CHE-8101131 A01; 12 MONTHS \$45,000)

YOST, RICHARD A. TRIPLE QUADRUPOLE MS/MS FOR DIRECT MIXTURE ANALYSIS (CHE-8106533 A01; 12 MONTHS \$55,001)

OHREN, YNGVE AND LATHOUWERS, LUC. A GENERATOR COORDINATE APPROACH TO COLLECTIVE MOTION IN MOLECULES (CHE-8114852; 12 MONTHS \$35,367)

JONES, WILLIAM M. CYCLIC CONJUGATED CARBENES AND ALLENES: FREE AND COMPLEXED TO TRANSITION METALS (CHE-8120005; 12 MONTHS \$64,700)

WELTNER, WILLIAM. ESR AND OPTICAL SPECTROSCOPY OF IONS, CLUSTERS AND HYDRIDES (CHE-8120066; 12 MONTHS \$44,000)

BATES, ROGER G. ION ACTIVITIES IN AQUEOUS SYSTEMS, SALINE MEDIA, AND SEAWATER (CHE-8120592*; 12 MONTHS \$7,567)

LAITINEN, HERBERT A. ANODIC STUDIES OF TIN OXIDE ELECTRODES (CHE-8200341; 12 MONTHS \$56,977)

VALA, MARTIN T. SPECTROSCOPIC STUDIES ON MATRIX-ISOLATED HIGH TEMPERATURE SPECIES (CHEMISTRY) (CHE-8206142; 12 MONTHS \$100,000)

DOLBIER, WILLIAM R. THERMAL HOMOLYTIC REACTIONS OF PARTIALLY FLUORINATED HYDROCARBONS (CHEMISTRY) (CHE-8207052; 12 MONTHS \$75,000)

DUFFY, JAMES W. FLUCTUATIONS AND TRANSPORT IN SIMPLE FLUIDS (CHE-8207263; 12 MONTHS \$38,016)

DRAGO, RUSSELL S. QUANTITATIVE INVESTIGATION OF CHEMICAL REACTIVITY (CHEMISTRY) (CHE-8213399; 12 MONTHS \$58,100)

UNIVERSITY OF MIAMI

DORDICK, ROBERT S. THERMODYNAMIC PROPERTIES OF NON-AQUEOUS SOLUTIONS OF ELECTROLYTES (CHE-8208993; 12 MONTHS \$51,982)

GEORGIA

EMORY UNIVERSITY

MANDELL, LEON. AN APPROACH TO THE QUASSINOLDS - THE SYNTHESIS OF QUASSIN (CHE-7917570 A02; 12 MONTHS \$35,500)

MENGER, FREDRIC M. THE GEOMETRY OF PROTON TRANSFER REACTIONS (CHE-8023353 A01; 12 MONTHS \$55,500)

PADWA, ALBERT. INTRAMOLECULAR CYCLOADDITIONS FOR THE SYNTHESIS OF POLYCYCLIC RINGS (CHE-8120171; 12 MONTHS \$77,774)

MANDELL, LEON. PURCHASE OF A NUCLEAR MAGNETIC RESONANCE SPECTROMETER (CHEMISTRY) (CHE-8206102; 12 MONTHS \$150,000)

GEORGIA INSTITUTE OF TECHNOLOGY MAIN CAMPUS

GROVENSTEIN, ERLING. CATION EFFECTS IN ORGANOALKALI METAL CHEMISTRY. ORGANOCESIUM CHEMISTRY (CHE-8009810 A01; 12 MONTHS \$60,000)

BROWNER, RICHARD F. SAMPLE PREPARATION AND INTRODUCTION FOR ANALYTICAL ATOMIC SPECTROSCOPY (CHE-8019947 A01; 12 MONTHS \$105,724)

ASHBY, EUGENE C. ORGANOMETALLIC REACTION MECHANISMS. THE IMPORTANCE OF SINGLE ELECTRON TRANSFER PATHWAYS (CHEMISTRY) (CHE-8101124 A01; 12 MONTHS \$85,800)

UNIVERSITY OF GEORGIA

ROGERS, L. B. SELECTIVITY IN ANALYTICAL CHEMICAL SYSTEMS (CHE-8110418; 12 MONTHS \$85,000)

STAMMER, CHARLES H. CYCLOPROPYL AMINO ACIDS (CHEMISTRY) (CHE-8122011; 12 MONTHS \$49,212)

HAWAII

UNIVERSITY OF HAWAII-MANOA

LIU, ROBERT S. NON-RADIATIVE PROCESSES IN ELECTRONICALLY EXCITED POLYENES (CHE-7912686 A02; 12 MONTHS \$40,100)

MOORE, RICHARD E. NATURAL PRODUCTS FROM MARINE ORGANISMS (CHEMISTRY) (CHE-7925416 A02; 12 MONTHS \$61,389)

SCHUEER, PAUL J. CHEMICAL COMMUNICATION OF MARINE INVERTEBRATES (CHEMISTRY) (CHE-8005780 A02; 12 MONTHS \$70,600)

FADLEY, CHARLES S. SURFACE-CHEMICAL AND SOLID-STATE STUDIES USING ANGLE-RESOLVED PHOTOELECTRON SPECTROSCOPY, LOW ENERGY ELECTRON DIFFRACTION, AND ELECTRON ENERGY LOSS SPECTROSCOPY (CHE-8021355 A01; 12 MONTHS \$161,500)

IDAHO

UNIVERSITY OF IDAHO

SHREEVE, JEANNE M. PURCHASE OF MASS SPECTROMETER FOR STRUCTURAL STUDIES IN ORGANIC AND INORGANIC CHEMISTRY (CHEMISTRY) (CHE-8203058; 12 MONTHS \$100,400)

ILLINOIS

ILLINOIS INSTITUTE OF TECHNOLOGY

GUTMAN, DAVID. DYNAMICS OF OXYGEN ATOM; REACTIONS (CHEMISTRY) (CHE-8006573 A04; 12 MONTHS \$65,500)

BOWMAN, JOEL M. THEORY OF MOLECULAR COLLISION DYNAMICS (CHE-8117484; 12 MONTHS \$42,210)

NORTHWESTERN UNIVERSITY

BORDWELL, FREDERICK G. EQUILIBRIA AND RATES IN DIPOLAR NONHYDROXYLIC SOLVENTS (CHEMISTRY) (CHE-8007844 A02; 12 MONTHS \$77,000)

MARKS, TOBIN J. STOICHIOMETRIC AND CATALYTIC ORGANOFELEMENT CHEMISTRY (CHE-8020660 A02; 12 MONTHS \$87,836)

IBERS, JAMES A. STRUCTURE AND PROPERTIES OF TRANSITION-METAL COMPLEXES (CHEMISTRY) (CHE-8009671 A03; 12 MONTHS \$115,000)

BENDER, MYRON L. MECHANISMS OF CATALYSIS OF ORGANIC REACTIONS (CHEMISTRY) (CHE-8012697 A02; 12 MONTHS \$60,000)

- RATNER, MARK A; FORMAL AND NUMERICAL THEORETICAL STUDIES ON ELECTRON DELOCALIZATION AND INTRAMOLECULAR ELECTRON TRANSFER (CHE-8024130 A01); 12 MONTHS \$39,992
- LAMBERT, JOSEPH B; THE STRUCTURE OF ORGANIC REACTION INTERMEDIATES (CHE-8025601 A01); 12 MONTHS \$96,700
- LEWIS, FREDERICK D; PHOTOCHEMICAL REACTIONS IN SOLUTION AND THE GAS PHASE (CHE-8026020 A01); 12 MONTHS \$84,000
- TROGLER, WILLIAM C; PHOTOCHEMICAL REACTIONS OF ORGANOMETALLIC COMPLEXES (CHE-8105069 A01); 12 MONTHS \$43,000
- SCHATZ, GEORGE C; THEORETICAL STUDIES OF SMALL MOLECULE CHEMICAL DYNAMICS (CHE-8115109); 12 MONTHS \$60,000
- SHRIVER, DUWARD F; BIFUNCTIONAL ACTIVATION AND REDUCTION OF COORDINATED CARBON MONOXIDE (CHE-8204401); 12 MONTHS \$76,399
- VAN DUYN, RICHARD P; MOLECULAR CHARACTERIZATION OF THE ELECTRODE/SOLUTION INTERFACE BY RAMAN SPECTROSCOPIC TECHNIQUES (CHEMISTRY) (CHE-8205801); 9 MONTHS \$118,421
- STAIR, PETER C; SURFACE CHEMISTRY OF CHEMICALLY MODIFIED MOLYBDENUM SURFACES (CHEMISTRY) (CHE-8206104); 12 MONTHS \$125,000
- WEITZ, ERIC; LASER INDUCED CHEMISTRY AND VIBRATIONAL ENERGY TRANSFER STUDIES (CHE-8206976); 12 MONTHS \$120,000
- UNIVERSITY OF CHICAGO
- HALPERN, JACK; COORDINATION CHEMISTRY AND HOMOGENEOUS CATALYSIS (CHE-7801192 A04); 12 MONTHS \$159,939
- HALPERN, JACK; COORDINATION CHEMISTRY AND HOMOGENEOUS CATALYSIS (CHE-7801192 A05); \$29,304
- LEVY, DONALD H; SPECTROSCOPY OF SUPERSONIC MOLECULAR BEAMS (CHE-7825555 A03); 12 MONTHS \$151,253
- LEVY, DONALD H; SPECTROSCOPY OF SUPERSONIC MOLECULAR BEAMS (CHE-7825555 A04); 12 MONTHS \$130,800
- FLEMING, GRAHAM R; THEORETICAL AND EXPERIMENTAL STUDIES OF LIQUIDS AND LIQUID SURFACES (CHE-8005877 A01); 12 MONTHS \$167,928
- GOMER, ROBERT; ADSORPTION ON METALS (CHEMISTRY) (CHE-8007999 A02); 14 MONTHS \$142,000
- FLEMING, GRAHAM R; INFLUENCE OF SOLVENT-SOLUTE INTERACTIONS ON MOLECULAR DYNAMICS (CHEMISTRY) (CHE-8009216 A02); 12 MONTHS \$94,883
- SMITH, JOSEPH V; CRYSTAL STRUCTURES OF ZEOLITE MOLECULAR SIEVES AND CATALYSTS (CHEMISTRY) (CHE-8023444 A01); 12 MONTHS \$67,066
- FREED, KARL F; INDUSTRY/UNIVERSITY COOPERATIVE ACTIVITY: THEORETICAL STUDIES IN CHEMISTRY (CHE-8023456 A01*); 12 MONTHS \$90,237
- FREED, KARL F; THEORETICAL AND EXPERIMENTAL STUDIES OF INTRAMOLECULAR DYNAMICS (CHE-8024645 A01); 12 MONTHS \$84,976
- OKTOBY, DAVID W; THEORETICAL STUDIES OF COLLISION INDUCED SPECTROSCOPY AND CONDENSED PHASE RELAXATION (CHEMISTRY) (CHE-8106068 A01); 12 MONTHS \$45,000
- KLEPPA, OLE J; HIGH TEMPERATURE CALORIMETRY OF REFRACTORY SYSTEMS (CHEMISTRY) (CHE-8106980 A01*); 12 MONTHS \$85,798
- HUTCHISON, CLYDE A; MAGNETIC RESONANCE AND OPTICAL EMISSION OF F-ELECTRON IONS (CHEMISTRY) (CHE-8109035 A02); 12 MONTHS \$50,000
- YANG, NIEN-CHU C; PHOTOCHEMISTRY OF ORGANIC COMPOUNDS (CHE-8112964); 12 MONTHS \$124,000
- KAISER, EMIL T; SEMI-SYNTHETIC ENZYMES: THE DESIGN OF NEW ACTIVE SITES (CHE-8114181); 14 MONTHS \$127,200
- EATON, PHILIP E; SYNTHESIS AND CHEMISTRY OF UNUSUAL POLYCYCLIC SYSTEMS (CHE-8118391); 12 MONTHS \$87,574
- LIGHT, JOHN C; THEORY OF GAS PHASE DYNAMICAL PROCESSES IN CHEMISTRY (CHE-8205453); 12 MONTHS \$84,005
- LIGHT, JOHN C; PURCHASE OF A NUCLEAR MAGNETIC RESONANCE SPECTROMETER (CHEMISTRY) (CHE-8206978); 12 MONTHS \$146,000
- UNIVERSITY OF ILLINOIS AT CHICAGO CIRCLE
- YOUNG, PAUL R; THE DRIVING FORCE FOR MECHANISMS OF NUCLEOPHILIC SUBSTITUTION AT TRICOORDINATE SULFUR (CHE-8000054 A02); 12 MONTHS \$33,400
- KEIDERLING, TIMOTHY A; EXPERIMENTAL AND THEORETICAL STUDIES OF VIBRATIONAL CIRCULAR DICHROISM (CHEMISTRY) (CHE-8104397 A01); 12 MONTHS \$55,000
- JAMESON, CYNTHIA J; EFFECTS OF INTERMOLECULAR INTERACTIONS AND INTRAMOLECULAR DYNAMICS ON NUCLEAR RESONANCE (CHE-8116183); 12 MONTHS \$51,000
- GORENSTEIN, DAVID G; STEREOELECTRONIC EFFECTS IN ORGANO-PHOSPHORUS COMPOUNDS (CHEMISTRY) (CHE-8205353); 12 MONTHS \$61,390
- GORDON, ROBERT J; STATE-TO STATE MEASUREMENTS OF REACTION CROSS SECTIONS (CHEMISTRY) (CHE-8206119); 12 MONTHS \$113,065
- MORRISON, JOHN A; REACTIVE CLUSTER COMPOUNDS-THE ELECTRON DEFICIENT POLYHEDRAL BORON HALIDES (CHE-8207431); 12 MONTHS \$60,700
- UNIVERSITY OF ILLINOIS AT URBANA
- SUSLICK, KENNETH S; THE SONOCHEMISTRY OF TRANSITION METALS AND THEIR COMPLEXES (CHE-8020006 A01); 12 MONTHS \$39,600
- BELFORD, R L; NUCLEAR QUADRUPOLE COUPLING AND ANISOTROPIES IN EPR OF METAL IONS (CHE-8020443 A01); 12 MONTHS \$44,000
- MCDONALD, J D; VIBRATIONAL DYNAMICS (CHE-8020454 A01); 12 MONTHS \$90,000
- SCHUSTER, GARY B; THE CHEMISTRY OF HIGH ENERGY CONTENT REACTANTS (CHE-8024660 A01); 12 MONTHS \$69,300
- BEAK, PETER A; FACTORS AFFECTING CHEMICAL STRUCTURE AND STABILITY (CHE-8025236 A01); 12 MONTHS \$55,800
- SHAPLEY, JOHN R; ORGANOMETAL CLUSTER CHEMISTRY AND CATALYSIS (CHE-8100140 A01); 12 MONTHS \$112,500
- ARDUENGO, ANTHONY J; NEW AND UNUSUAL BONDING SYSTEMS (CHEMISTRY) (CHE-8104980 A01); 12 MONTHS \$56,700
- PIRKLE, WILLIAM H; STEREOSPECIFIC SOLVATION STUDIES (CHE-8105030 A01); 12 MONTHS \$100,000
- FAULKNER, LARRY R; ELECTRON TRANSFER IN SYSTEMS OF CONTROLLED ARCHITECTURE (CHE-8106026 A01); 12 MONTHS \$115,500
- KLEMPERER, WALTER G; QUANTITATIVE INVESTIGATIONS OF CHEMICAL REACTIVITY (CHE-8106058 A01); 12 MONTHS \$35,000
- RAUCHFUSS, THOMAS B; THE BINDING AND ACTIVATION OF SIMPLE CHALCOGENIDE LIGANDS BY TRANSITION METALS (CHE-8106787 A01); 12 MONTHS \$46,600
- NIEMAN, TIMOTHY A; INVESTIGATIONS IN ANALYTICAL CHEMILUMINESCENCE (CHE-8108816 A01); 12 MONTHS \$61,000
- JONAS, JIRI; EXPERIMENTAL STUDIES OF THE DYNAMIC STRUCTURE OF LIQUIDS (CHEMISTRY) (CHE-8111176 A01); 12 MONTHS \$90,000
- MARTIN, JAMES C; REACTIVE INTERMEDIATES USEFUL IN SYNTHESIS (CHE-8113142 A01); 12 MONTHS \$98,500
- SCHHEELINE, ALEXANDER; PROPERTIES OF FREE ELECTRONS IN ANALYTICALLY USEFUL ELECTRICAL DISCHARGES (CHE-8116702 A01); 12 MONTHS \$43,900
- SECRET, DONALD H; GAS PHASE COLLISION PROCESSES (CHE-8119406); 12 MONTHS \$52,038
- BROWN, THEODORE L; MECHANISTIC STUDIES IN ORGANOMETALLIC CHEMISTRY (CHE-8119525); 12 MONTHS \$71,000
- CURTIN, DAVID Y. AND PAUL, IAIN C; REACTIONS OF MOLECULAR CRYSTALS (CHE-8119808); 12 MONTHS \$88,000
- RINEHART, KENNETH L; PURCHASE OF A HIGH FIELD FAST ATOM BOMBARDMENT MASS SPECTROMETER (PCM-8121494*); 12 MONTHS \$25,000
- LEONARD, NELSON J; REARRANGEMENTS AND INTERACTIONS, ESPECIALLY OF NUCLEIC ACID BASES (CHE-8121796); 12 MONTHS \$85,000
- SCHHEELINE, ALEXANDER; SIMULATION OF EXPERIMENTALLY OBSERVABLE PROCESSES IN PULSED ANALYTICAL DISCHARGES (CHE-8121809); 12 MONTHS \$41,935
- WOLYNES, PETER G; NONEQUILIBRIUM STATISTICAL MECHANICS (CHE-8122012); 12 MONTHS \$73,417
- CHANDLER, DAVID; THEORY OF MOLECULAR FLUIDS AND QUANTUM PROCESSES IN LIQUIDS (CHE-8200633); 12 MONTHS \$81,300
- COATES, ROBERT M; TOTAL SYNTHESIS OF TERPENES CONTAINING 8-MEMBERED RINGS (CHEMISTRY) (CHE-8204485); 12 MONTHS \$47,000
- DYKSTRA, CLIFFORD E; OPERATOR/COEFFICIENT MATRIX ELECTRON CORRELATION METHODS AND APPLICATION TO WEAKLY BOUND COMPLEXES (CHEMISTRY) (CHE-8205674); 12 MONTHS \$45,000
- LISY, JAMES S; VIBRATIONAL SPECTROSCOPY OF ISOLATED MOLECULAR CLUSTERS (CHEMISTRY) (CHE-8205811); 12 MONTHS \$114,000
- KLEMPERER, WALTER G; SYNTHESIS OF EARLY TRANSITION METAL POLYOXOANIONS AND THEIR ORGANIC DERIVATIVES (CHE-8208059); 12 MONTHS \$142,197
- DENMARK, SCOTT E; THE STEREOCHEMISTRY OF ACCEPTOR DOUBLE BOND-DONOR DOUBLE BOND REACTIONS (CHEMISTRY) (CHE-8208465); 12 MONTHS \$36,419
- INDIANA
- INDIANA UNIVERSITY, BLOOMINGTON
- KOCHI, JAY K; OXIDATION-REDUCTION AND HOMOGENEOUS CATALYSIS OF ORGANIC COMPOUNDS BY METAL SPECIES (CHE-7908631 A01); 12 MONTHS \$155,000
- HIEFTJE, GARY M; DEVELOPMENT AND EVALUATION OF INSTRUMENTATION AND METHODS FOR MULTI-ELEMENT ANALYSIS (CHE-7918073 A02); 12 MONTHS \$55,220
- PARMENTER, CHARLES S; ENERGY CONVERSION MECHANISMS IN POLYATOMIC VAPORS (CHE-7918077 A02); 12 MONTHS \$70,000
- PARMENTER, CHARLES S; ENERGY CONVERSION MECHANISMS IN POLYATOMIC VAPORS (CHE-7918077 A03); \$7,000
- BARTMESS, JOHN E; GAS PHASE ORGANIC NEGATIVE ION-MOLECULE REACTIONS (CHE-7919528 A02); 12 MONTHS \$34,000
- BONHAM, RUSSELL A; HIGH ENERGY ELECTRON IMPACT SPECTROSCOPY (CHEMISTRY) (CHE-8000253 A02); 12 MONTHS \$77,894
- CHISHOLM, MALCOLM H; THE DEVELOPMENT OF DINUCLEAR AND POLYNUCLEAR/CLUSTER TRANSITION METAL CHEMISTRY (CHE-8001678 A02); 12 MONTHS \$93,003
- LANGHOFF, PETER W; THEORETICAL STUDIES IN MOLECULAR IONIZATION SPECTROSCOPY (CHEMISTRY) (CHE-8002080 A02); 12 MONTHS \$41,846
- ORTOLEVA, PETER J; INSTABILITY AND NONLINEAR PHENOMENA IN PHYSICO-CHEMICAL SYSTEMS (CHE-8002438 A02); 12 MONTHS \$28,100
- CAULTON, KENNETH G; REDUCTIVE OLIGOMERIZATION OF CARBON MONOXIDE (CHE-8006331 A02); 12 MONTHS \$89,493
- HIEFTJE, GARY M; CHARACTERIZATION AND OPTIMIZATION OF FLAME SPECTROMETRIC PROCESSES AND TECHNIQUES (CHE-8025633 A01); 12 MONTHS \$105,046
- MAGNUS, PHILIP D; APPLICATIONS OF ORGANOSILICON CHEMISTRY IN SYNTHESIS (CHE-8110674 A01); 12 MONTHS \$52,000
- SHINER, VERNON J; PURCHASE OF A HIGH RESOLUTION GAS CHROMATOGRAPH MASS SPECTROMETER (CHE-8111957); 12 MONTHS \$208,900
- REILLY, JAMES P. AND EWING, GEORGE E; MOLECULAR BEAM VIBRATIONAL SPECTROSCOPY (CHE-8116962); 12 MONTHS \$173,700

GAJEWSKI, JOSEPH J; ENERGY SURFACES OF THERMAL REACTIONS (CHE-811698J); 12 MONTHS \$65,000
 WIGHTMAN, R MARK; MICROVOLTAMMETRIC ELECTRODES (CHEMISTRY) (CHE-812145Z); 12 MONTHS \$45,043
 NOVOTNY, MILOS V; CAPILLARY SUPERCRITICAL FLUID CHROMATOGRAPHY (CHE-820004L); 12 MONTHS \$87,153
 SHINER, VERNON J; ISOTOPE EFFECTS AND NUCLEOPHILIC SUBSTITUTION, ELIMINATION AND REARRANGEMENT (CHEMISTRY) (CHE-820933Z); 10 MONTHS \$78,000

PURDUE UNIVERSITY

BROOKS, DEE W; MECHANISMS OF CARBANION-INDUCED BOND BREAKING (CHE-791683I A03); 12 MONTHS \$46,000
 BROWN, HERBERT C; ORGANOBORANES - NEW CHEMISTRY AND MECHANISMS (CHE-791888I A02); 12 MONTHS \$92,000
 MORRISON, HARRY A; PHOTOCHEMICAL CONSEQUENCES OF INTERCHROMOPHORE INTERACTIONS (CHE-7926499 A02); 12 MONTHS \$51,800

KORNBLUM, NATHAN; NEW REACTIONS BASED ON ELECTRON TRANSFER PROCESSES (CHE-800211S A02); 12 MONTHS \$37,800
 FREISER, BEN S; REACTIONS OF METAL IONS AND THEIR CLUSTERS IN THE GAS PHASE USING LASER IONIZATION - ION CYCLOTRON RESONANCE SPECTROSCOPY (CHE-8002685 A02); 12 MONTHS \$42,693
 JORGENSEN, WILLIAM L; COMPUTER ASSISTED MECHANISTIC ANALYSIS OF ORGANIC REACTIONS (CHEMISTRY) (CHE-8007965 A02); 12 MONTHS \$48,912

COOKS, ROBERT G; MIXTURE ANALYSIS BY MASS SPECTROMETRY/MASS SPECTROMETRY, NEW METHODOLOGIES AND INSTRUMENTATION (CHE-8011425 A02); \$49,520

COOKS, ROBERT G; MIXTURE ANALYSIS BY MASS SPECTROMETRY/MASS SPECTROMETRY, NEW METHODOLOGIES AND INSTRUMENTATION (CHE-8011425 A03); 12 MONTHS \$98,000

ADELMAN, STEVEN A; CHEMISTRY IN CONDENSED PHASES (CHEMISTRY) (CHE-8018285 A02); 12 MONTHS \$54,000

JORGENSEN, WILLIAM L; THEORETICAL STUDIES OF ORGANIC CHEMISTRY IN SOLUTION (CHE-8020466 A01); 12 MONTHS \$45,000

LYTLE, FRED E; THE USE OF LASERS IN SPECTROSCOPIC METHODS OF ANALYSIS (CHE-8024635 A01); 12 MONTHS \$83,127

WIFFREE, ARTHUR T; WAVE GEOMETRY OF DIFFUSION COUPLED REACTIONS (CHE-8103322*); 12 MONTHS \$34,000

NEGISHI, EI-ICHI; BIMETALLIC REAGENT SYSTEMS AND THEIR APPLICATION TO SELECTING ORGANIC SYNTHESIS (CHE-8104999 A01); 12 MONTHS \$53,700

MCMILLIN, DAVID R; PHOTOACTIVATED MONONUCLEAR AND POLYNUCLEAR REDOX AGENTS (CHE-8105003); 12 MONTHS \$58,000

COOKS, ROBERT G; MOLECULAR SIMS: MECHANISMS, ANALYTICAL APPLICATIONS AND IMPLICATIONS FOR CATALYSIS (CHE-8114410); 12 MONTHS \$110,800

MARGERUM, DALE W; PURCHASE OF A MINICOMPUTER AND STRUCTURE DETERMINATION ACCESSORY FOR X-RAY DIFFRACTION (CHE-8204994); 12 MONTHS \$39,000

FUCHS, PHILIP L; STEREOCONTROLLED TOTAL SYNTHESIS OF NATURAL PRODUCTS (CHE-8205124); 12 MONTHS \$54,435

WALTON, RICHARD A; DINUCLEAR COMPLEXES CONTAINING METAL-METAL DOUBLE BONDS (CHE-8206117); 12 MONTHS \$76,880

UNIVERSITY OF NOTRE DAME

FEHLNER, THOMAS P; SYNTHESIS, STRUCTURE AND REACTIVITY OF CLUSTERS OF IRON AND BORON (CHE-8109503 A01); 12 MONTHS \$64,300

MILLER, MARVIN J; THE CHEMISTRY OF α -KETO DIANIONS (CHE-8111128 A01); 15 MONTHS \$46,770

THOMAS, J KERRY; PHOTOCHEMICAL STUDIES IN ORGANIZED ASSEMBLIES OF ORGANIC MOLECULES (CHE-8201226); 12 MONTHS \$107,000

KOWALSKI, CONRAD J; GROUP TRAVEL FOR U.S. PARTICIPANTS IN THE FOURTH INTERNATIONAL CONFERENCE ON ORGANIC SYNTHESIS, TOKYO, JAPAN, AUGUST 22-27, 1982 (CHE-8207262); 12 MONTHS \$33,000

IOWA

IOWA STATE UNIVERSITY OF SCIENCE & TECHNOLOGY

BARTON, THOMAS J; (P-P) PI-BONDED SILICON (CHEMISTRY) (CHE-8024678 A01); 12 MONTHS \$36,000

ANGELICI, ROBERT J; TRANSITION METAL THIOCARBONYL COMPLEXES AND THEIR DERIVATIVES (CHE-8100419 A01); 12 MONTHS \$50,000

HOFFMAN, DAVID K; PURCHASE OF ELECTRON PARAMAGNETIC RESONANCE SPECTROMETER (CHE-8116736); 12 MONTHS \$81,400

RUSSELL, GLEN A; CHEMISTRY OF RADICAL IONS (CHE-8119343); 12 MONTHS \$54,500

VERKADE, JOHN G; STEREOELECTRONIC EFFECTS IN PHOSPHORUS LIGANDS AND NOVEL HYPERVALENT NON-METALLIC COMPOUNDS (CHE-8119407); 12 MONTHS \$52,400

HOFFMAN, DAVID K; PURCHASE OF NUCLEAR MAGNETIC RESONANCE SPECTROMETER (CHEMISTRY) (CHE-8209709); 12 MONTHS \$120,000

DEPRISTO, ANDREW E; QUANTUM NUMBER SCALING THEORIES: MATHEMATICAL FOUNDATIONS; APPLICATIONS TO MOLECULAR COLLISION PROCESSES (CHEMISTRY) (CHE-8212563); 12 MONTHS \$49,000

UNIVERSITY OF IOWA

PIETRZYK, DONALD J; THE CHROMATOGRAPHY OF AMINO ACIDS, PEPTIDES AND AMINO ACID DERIVATIVES (CHE-7913203 A02); 12 MONTHS \$41,781

STWALLEY, WILLIAM C; LONG-RANGE MOLECULES (CHE-8019033 A01); 12 MONTHS \$55,000

BURTON, DONALD J; YLIDE-FLUOROOLEFIN CHEMISTRY (CHE-8021311 A01); 12 MONTHS \$70,100

NAIM, VASU, AND DAVIS, LEODIS; THE DEGENERATIVE CHEMISTRY OF NATURAL MALONDIALDEHYDE (CHEMISTRY) (CHE-8200818); 12 MONTHS \$47,495

DAVIS, LEODIS; PURCHASE OF A HIGH FIELD MULTINUCLEAR NUCLEAR MAGNETIC RESONANCE SPECTROMETER FOR RESEARCH IN CHEMISTRY AND BIOCHEMISTRY (CHE-8201836); 12 MONTHS \$150,000

GOFF, HAROLD; METALLOPORPHYRINS IN UNUSUAL OXIDATION STATES (CHEMISTRY) (CHE-8209308); 12 MONTHS \$35,900

KANSAS

KANSAS STATE UNIVERSITY

SETSER, DONALD W; ENERGY DISPOSAL AND ENERGY REQUIREMENTS OF CHEMICAL REACTIONS (CHE-7721380 A05); 12 MONTHS \$80,000

SETSER, DONALD W; ENERGY DISPOSAL AND ENERGY REQUIREMENTS OF CHEMICAL REACTIONS (CHE-7721380 A06); \$6,100

FATELEY, WILLIAM G; STUDIES IN FOURIER TRANSFORM INFRARED (FTIR) SPECTROSCOPY (CHEMISTRY) (CHE-8109570 A01); 12 MONTHS \$40,000

KLABUNDE, KENNETH J; ORGANIC CHEMISTRY OF METAL VAPORS AND METAL OXIDE VAPORS (CHE-8201943); 12 MONTHS \$74,100

KLABUNDE, KENNETH J; PURCHASE OF A MULTINUCLEAR MAGNETIC RESONANCE SPECTROMETER (CHEMISTRY) (CHE-8207107); 12 MONTHS \$161,000

HAWLEY, M; ELECTRON-TRANSFER PROCESSES: AN ELECTROCHEMICAL STUDY OF CARBENE AND NITRENE ANION RADICALS (CHEMISTRY) (CHE-8211405); 12 MONTHS \$63,254

UNIVERSITY OF KANSAS MAIN CAMPUS

HARMONY, MARLIN D; PURCHASE OF AN AUTOMATED POLARIMETER (CHEMISTRY) (CHE-8208787); 12 MONTHS \$10,500

WICHITA STATE UNIVERSITY

CORNELIUS, RICHARD D; FACTORS AFFECTING METAL-CATALYZED PHOSPHATE HYDROLYSIS (CHE-8024043 A01); 12 MONTHS \$36,300

KENTUCKY

UNIVERSITY OF KENTUCKY

TOLBERT, LAREN M; PRIMARY PHOTOCHEMICAL PROCESSES IN CARBANIONS (CHE-8024644 A01); 12 MONTHS \$37,500

UNIVERSITY OF LOUISVILLE

GIBSON, DOROTHY H; CYCLIC ORGANIC PEROXIDES (CHE-7926044 A02); 12 MONTHS \$32,700

LOUISIANA

LOUISIANA STATE UNIVERSITY, BATON ROUGE

PRYOR, WILLIAM A; FREE RADICAL REACTIONS IN SOLUTION (CHE-7921514 A02); 12 MONTHS \$71,100

DAY, M CLYDE; ION-ION AND ION-SOLVENT INTERACTIONS IN NONAQUEOUS TWO LIQUID PHASE SYSTEMS (CHE-8004473 A01); 12 MONTHS \$28,382

NEWKOME, GEORGE R; CHEMISTRY OF BINUCLEAR COMPLEXES DERIVED FROM TWODIMENSIONAL MACROCYCLIC LIGANDS: STRUCTURAL ASPECTS AND CHEMISORPTION PROCESSES (CHE-8015354 A02); 12 MONTHS \$53,500

DALY, WILLIAM H; PURCHASE OF A SPECTROFLUOROMETER (CHEMISTRY) (CHE-8205698); 12 MONTHS \$24,250

TULANE UNIVERSITY

DARENSBOURG, MARCETTA Y; PROTECTION AND/OR ACTIVATION OF TRANSITION METAL HYDRIDES BY INTERACTING LEWIS ACIDS AND CATIONS (CHE-7923204 A02); 3 MONTHS \$9,411

UNIVERSITY OF NEW ORLEANS

KERN, RALPH D; PURCHASE OF AN X-RAY DIFFRACTOMETER FOR HIGH RESOLUTION STUDIES OF THE STRUCTURE OF SOLIDS (CHEMISTRY) (CHE-8208754); 12 MONTHS \$84,000

MAINE

UNIVERSITY OF MAINE, ORONO

ANDEREGG, ROBERT J; SELECTIVE DATA REDUCTION METHODS FOR GAS CHROMATOGRAPHIC MASS SPECTROMETRY (CHE-8209056); 12 MONTHS \$36,325

MARYLAND

JOHNS HOPKINS UNIVERSITY

POSNER, GARY H; ORGANIC SYNTHESIS USING OPTICALLY ACTIVE ALPHA, BETAETHYLENIC SULFOXIDES (CHE-7915161 A02); 12 MONTHS \$48,672

DOERING, JOHN P; HIGH RESOLUTION, LOW ENERGY ELECTRON IMPACT SPECTROSCOPY (CHE-7926061 A02); 12 MONTHS \$50,000

DAGDIGIAN, PAUL J; STUDIE OF STATE-TO-STATE COLLISION DYNAMICS AND MOLECULAR SPECTROSCOPY USING TUNABLE DYE LASERS (CHE-8025614 A01); 12 MONTHS \$45,000

DAGDIGIAN, PAUL J, AND ALEXANDER, MILLARD H; A COLLABORATIVE EXPERIMENTAL AND THEORETICAL STUDY OF ROTATIONALLY INELASTIC COLLISIONS (CHE-8108464 A01); 12 MONTHS \$76,101

YARKONY, DAVID R; CHEMISTRY OF GROUP IIA METALS (CHE-8121810); 12 MONTHS \$40,000

NICKON, ALEX; CIRCULARLY POLARIZED LIGHT IN ORGANIC CHEMISTRY (CHEMISTRY) (CHE-8200803); 9 MONTHS \$50,000

JOHNS HOPKINS UNIVERSITY-SCHOOL OF MEDICINE

COTTER, ROBERT J.; MOLECULAR ION PRODUCTION BY LASER MASS SPECTROMETRY (CHE-8016440 A01); 12 MONTHS \$78,000

UNIVERSITY OF MARYLAND, COLLEGE PARK

MARIANO, PATRICK S.; IMINIUM SALT PHOTOCHEMISTRY (CHE-8009813 A02); 12 MONTHS \$61,300

DORFMAN, J. ROBERT, AND ZWANZIG, ROBERT; RESEARCH IN STATISTICAL PHYSICS (CHEMISTRY) (CHE-8015976 A02); 12 MONTHS \$112,000

GREER, SANDRA C.; EXPERIMENTAL INVESTIGATIONS AT FLUID CRITICAL POINTS (CHEMISTRY) (CHE-8111962 A01); 12 MONTHS \$42,000

FRASER-REID, BERT O.; PYRANOSIDIC HOMOLOGATION - NEW METHODOLOGY FOR MULTIPLE CONTIGUOUS CHIRAL CENTRES (CHE-8120020); 12 MONTHS \$58,204

MOORE, JOHN H. AND TOSSELL, JOHN A.; ELECTRON TRANSMISSION SPECTROSCOPY (CHE-8121125); 12 MONTHS \$47,974

MCNESBY, JAMES R.; PURCHASE OF A DATA ACQUISITION AND ANALYSIS SYSTEM FOR STUDIES IN NUCLEAR CHEMISTRY (CHEMISTRY) (CHE-8200164*); 12 MONTHS \$25,000

COPLAN, MICHAEL A., MOORE, JOHN H. AND TOSSELL, JOHN A.; CHEMICAL APPLICATIONS OF (E,2E) SPECTROSCOPY (CHE-8205884); 12 MONTHS \$91,535

STEWART, JAMES M.; THE DEVELOPMENT OF A GENERALIZED TRANSPORTABLE SOFTWARE PACKAGE FOR THE SOLUTION AND REFINEMENT OF MOLECULAR STRUCTURES BY SINGLE CRYSTAL DIFFRACTION TECHNIQUES (CHEMISTRY) (CHE-8209957); 12 MONTHS \$51,261

MASSACHUSETTS

BOSTON COLLEGE

LIN, JEONG-LON; ON THE SORET EFFECT IN IONIC SOLUTIONS (CHEMISTRY) (CHE-8111781 A01); 12 MONTHS \$39,852

BOSTON UNIVERSITY

HOFFMAN, MORTON Z.; PHOTO AND RADIATION CHEMISTRY OF COORDINATION COMPLEXES (CHE-7918013 A02); 12 MONTHS \$63,500

DILL, DAN; EXPLORATION OF MANY-ELECTRON DYNAMICS IN MOLECULAR PHOTOIONIZATION AND ELECTRON-MOLECULE SCATTERING (CHEMISTRY) (CHE-8203267); 12 MONTHS \$55,000

BRANDEIS UNIVERSITY

KEHN, PHILIP; THE DEVELOPMENT OF THE UTILITY OF INFRARED LASER CHEMISTRY (CHE-7826310 A03); 12 MONTHS \$90,053

HENDRICKSON, JAMES B.; COMPUTERIZATION OF A NEW PROTOCOL FOR SYSTEMATIC SYNTHESIS DESIGN (CHE-8129272 A01); 12 MONTHS \$83,638

CHAN, I. Y.; SPECTROSCOPY AND LATTICE DYNAMICS OF CARBONYLS (CHE-8113452 A01); 12 MONTHS \$44,592

ROSENBLUM, MYRON; SYNTHETIC TRANSFORMATIONS OF ORGANIC ION COMPLEXES (CHE-8117510); 12 MONTHS \$76,934

EPSTEIN, IRVING R. AND KUSTIN, KENNETH; DESIGN AND MECHANISTIC STUDIES OF OSCILLATING CHEMICAL REACTIONS (CHEMISTRY) (CHE-8204085*); 8 MONTHS \$77,000

STUHL, LOUIS S.; CYANOMETALLATES: CHEMISTRY AND APPLICATIONS TO CATALYSIS (CHE-8209006); 12 MONTHS \$49,600

HARVARD UNIVERSITY

LIPSCOMB, WILLIAM N.; ELECTRONIC AND GEOMETRICAL STRUCTURES OF MOLECULES (CHE-7719899 A04); 12 MONTHS \$61,772

KISHI, YOSHITO; SYNTHETIC STUDIES IN THE FIELD OF NATURAL PRODUCTS CHEMISTRY (CHE-7806296 A04); 12 MONTHS \$120,031

KLEMPERER, WILLIAM; MOLECULAR STRUCTURE AND MOLECULAR COLLISIONS OF EXCITED STATES OF MOLECULES (CHEMISTRY) (CHE-7906905 A05); 12 MONTHS \$248,532

COREY, ELIAS J.; ORGANIC CHEMISTRY: MULTISTEP SYNTHESIS, NEW SYNTHETIC METHODOLOGY, EXPLORATORY CHEMISTRY (CHE-7912662 A02); 12 MONTHS \$211,879

KARPLUS, MARTIN; PROBLEMS IN THEORETICAL CHEMISTRY: ELECTRONIC STRUCTURE AND DYNAMICS OF MOLECULES IN VACUUM AND IN SOLUTION (CHE-7920433 A02*); 12 MONTHS \$94,000

WILSON, E.; STUDIES IN HYDROGEN BONDING, MOLECULAR STRUCTURE AND ROTATIONAL RELAXATION (CHEMISTRY) (CHE-8011956 A02); 12 MONTHS \$73,000

GORDON, ROY G.; INTERMOLECULAR FORCES AND MOLECULAR MOTION (CHE-8015804 A02); 12 MONTHS \$87,737

COOPER, N. JOHN; THE TRANSITION METAL TO CARBON DOUBLE BOND: SYNTHESIS OF ALKYLIDENE COMPLEXES (CHE-8016162 A02); 12 MONTHS \$57,737

VAIDA, VERONICA; DYNAMICS OF ELECTRONICALLY EXCITED STATES (CHE-8018318 A01); 12 MONTHS \$48,809

DOERING, WILLIAM V.; MECHANISMS OF THERMAL REARRANGEMENTS (CHE-8019427 A01); 12 MONTHS \$81,600

HOLM, RICHARD H.; PROBLEMS IN BIOLOGICALLY RELATED INORGANIC CHEMISTRY (CHE-8108017 A01); 12 MONTHS \$158,775

PETERS, KEVIN S.; PICOCSECOND DYNAMICS OF ION PAIRS (CHE-8117519); 12 MONTHS \$72,000

WHITESIDES, GEORGE M.; ORGANOMETALLIC CHEMISTRY AND CATALYSIS (CHE-8205143); 12 MONTHS \$160,884

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

PRITCHARD, DAVID E.; STATE-TO-STATE DIFFERENTIAL CROSS SECTIONS (CHE-7902967 A03); 12 MONTHS \$73,000

GREENE, FREDERICK D.; MECHANISMS OF ELECTROPHILIC ADDITION REACTIONS OF OLEFINS (CHE-8022783 A01); 12 MONTHS \$73,500

WRIGHTON, MARK S.; PRIMARY EXCITED STATE PROCESSES IN TRANSITION METAL ORGANOMETALLIC COMPLEXES (CHE-8024853 A02); 12 MONTHS \$145,000

SILBEY, ROBERT J.; QUANTUM MECHANICAL STUDIES OF THE COUPLING BETWEEN ELECTRONIC AND VIBRATIONAL STATES (CHE-8104047 A01); 12 MONTHS \$78,000

CHEN, SOW-HSIN, AND YIP, SIDNEY; DYNAMICAL STRUCTURE OF DENSE FLUIDS IN TWO AND THREE DIMENSIONS (CHE-8109071 A01); 12 MONTHS \$80,387

MASAMUNE, SATORU; CHEMISTRY OF THEORETICALLY SIGNIFICANT ORGANIC SPECIES AND ORGANIC SYNTHESIS (CHE-8104979 A01); 12 MONTHS \$84,200

GARLAND, CARL W.; ULTRASONIC MEASUREMENTS NEAR TRANSITION AND CRITICAL POINTS (CHEMISTRY) (CHE-8105071 A01); 12 MONTHS \$76,000

ROUSH, WILLIAM R.; INTRAMOLECULAR DIELS-ALDER REACTIONS: CATALYSIS AND ASYMMETRIC SYNTHESIS (CHE-8106987 A01); 12 MONTHS \$37,000

WILLIAMS, JOHN E.; CONSTRUCTION OF A 600 MHZ NUCLEAR MAGNETIC RESONANCE SPECTROMETER (CHE-8106374 A01*); 12 MONTHS \$149,558

KINSEY, JAMES L.; STUDIES OF MOLECULAR COLLISIONS (CHEMISTRY) (CHE-8109163 A01); 12 MONTHS \$129,800

STEINFELD, JEFFREY I.; COHERENT TRANSIENT AND DOUBLE RESONANCE SPECTROSCOPY IN THE INFRARED AND OPTICAL REGIONS (CHE-8109963 A01); \$33,684

STEINFELD, JEFFREY I.; COHERENT TRANSIENT AND DOUBLE RESONANCE SPECTROSCOPY IN THE INFRARED AND OPTICAL REGIONS (CHEMISTRY) (CHE-8109963 A02); 12 MONTHS \$67,000

OPPENHEIM, IRWIN; TRANSPORT AND RELAXATION PROCESSES (CHE-8110716 A01); 12 MONTHS \$89,000

DANHEISER, RICK L.; ALLENE DERIVATIVES IN NATURAL PRODUCT SYNTHESIS (CHE-8111179 A01); 12 MONTHS \$35,000

WAUGH, JOHN S.; NEW EXPERIMENTAL METHODS IN NMR (CHEMISTRY) (CHE-8111180 A01); 12 MONTHS \$150,404

SHARPLESS, K.; OXIDATIONS OF HYDROCARBONS CATALYZED BY INORGANIC OXO AND PEROXO COMPOUNDS AND RELATED SPECIES (CHE-8111562 A01); 12 MONTHS \$132,900

FIELD, ROBERT W.; INELASTIC PROCESSES AT THE STATE-TO-STATE LEVEL AND BEYOND (CHE-8112966); 12 MONTHS \$120,064

DEUTCH, JOHN M.; STATISTICAL MECHANICAL INVESTIGATIONS OF VARIOUS ASPECTS OF STRUCTURE AND RELAXATION IN POLYMER AND FLUID SYSTEMS (CHE-8116613); 12 MONTHS \$118,199

KEMP, DANIEL S.; TEMPLATES FOR PROTEIN SECONDARY STRUCTURES (CHEMISTRY) (CHE-8116986); 12 MONTHS \$82,202

RASTETTER, WILLIAM H.; NUCLEOPHILIC DISPLACEMENTS AT SULFUR. SYNTHESIS OF FUNGAL METABOLITES (CHE-8120783); 12 MONTHS \$61,448

SCHROCK, RICHARD R.; MULTIPLE METAL-CARBON BONDS, METALLACYCLES, AND CATALYTIC REACTIONS INVOLVING OLEFINS (CHE-8121282); 12 MONTHS \$164,666

STEINFELD, JEFFREY I., SMITH, DONALD L. AND REINBERG, ALAN R.; INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH: LASER-INITIATED CHEMICAL REACTIONS AT SEMICONDUCTOR SURFACES (CHE-8131472*); 12 MONTHS \$85,000

SEYFERTH, DIETMAR; ORGANOMETALLIC CHEMISTRY - SYNTHESIS AND REACTIONS (CHE-8205666); 12 MONTHS \$109,175

CEYER, SYLVIA T.; DYNAMICS OF DISSOCIATIVE ADSORPTION (CHEMISTRY) (CHE-8206422); 12 MONTHS \$169,948

LIPPARD, STEPHEN J.; LIGAND BRIDGED BIMETALLIC COMPLEXES AND HIGH COORDINATE METAL ISOCYANIDE CHEMISTRY (CHE-8219587); 8 MONTHS \$111,099

NORTHEASTERN UNIVERSITY

KARGER, BARRY L.; STUDIES IN LIQUID AND GAS CHROMATOGRAPHY (CHE-7918536 A02); 12 MONTHS \$78,000

UNIVERSITY OF MASSACHUSETTS, AMHERST

ARPINO, LOUIS A.; SYNTHETIC UTILITY OF LOW TEMPERATURE REVERSED DIELS-ALDER REACTIONS (CHE-7923622 A02); 12 MONTHS \$32,000

RAUSCH, MARVIN D.; ORGANIC DERIVATIVES OF THE EARLY TRANSITION METALS (CHE-8018210 A01); 12 MONTHS \$45,000

STENGLE, THOMAS R.; NUCLEAR MAGNETIC RESONANCE STUDIES OF XENON IN LIQUID SOLVENTS AND BIOLOGICAL SYSTEMS (CHEMISTRY) (CHE-8103004 A01); 12 MONTHS \$29,000

RAGLE, JOHN L.; DOUBLE RESONANCE NMR STUDIES OF ENTRAPPED-MOLECULES IN CLATHRATES AND ISOLATION MATRICES (CHEMISTRY) (CHE-8111431 A01); 12 MONTHS \$36,450

HOLMES, ROBERT R.; LIGAND EXCHANGE AND REACTION MECHANISMS FOR NONRIGID MOLECULES OF MAIN GROUP ELEMENTS (CHEMISTRY) (CHE-8205411); 12 MONTHS \$70,000

MICHIGAN

HOPE COLLEGE

DOYLE, MICHAEL P.; FORMATION AND REACTIONS OF DINITROGEN COMPOUNDS (CHEMISTRY) (CHE-7824086 A03); \$9,500

MICHIGAN STATE UNIVERSITY

CUKIER, ROBERT I.; NONEQUILIBRIUM STATISTICAL MECHANICS OF LIQUIDS AND CHEMICAL REACTIONS (CHE-7807849 A02); 12 MONTHS \$33,257

SCHWENDEMAN, RICHARD H.; SPECTROSCOPIC STUDIES OF MOLECULAR STRUCTURE, ENERGETICS AND DYNAMICS (CHEMISTRY) (CHE-7921319 A03); 12 MONTHS \$79,994

CROUCH, STANLEY R.; FAST KINETIC STUDIES OF ANALYTICAL SYSTEMS (CHE-7926490 A02); 12 MONTHS \$53,773

PINNAVAIA, THOMAS J. AND MORTLAND, MAX M.; LAYERED SILICATE INTERCALATION CATALYSTS (CHE-8002413 A02); 12 MONTHS \$78,602

POPOV, ALEXANDER I.; SOLVATION AND COMPLEXATION REACTIONS IN SOLUTIONS (CHE-8010809 A01); 12 MONTHS \$64,837

SCHWENDEMAN, RICHARD H.; STUDIES OF MOLECULAR STRUCTURE AND ENERGY TRANSFER BY MICROWAVE AND INFRARED LASER SPECTROSCOPY (CHEMISTRY) (CHE-8017534 A02); 12 MONTHS \$80,000

HART, HAROLD; STUDIES IN SYNTHETIC AND MECHANISTIC CHEMISTRY (CHE-8017746 A01); 12 MONTHS \$58,300

AVERILL, BRUCE A.; SYNTHETIC MODELS FOR THE PROSTHETIC GROUPS OF METALLOPROTEINS (CHE-8023222 A01); 12 MONTHS \$40,000

ALLISON, JOHN; ORGANOMETALLIC ION-MOLECULE REACTIONS (CHE-8023704 A01); 12 MONTHS \$35,300

KARABATSOS, G. J.; PURCHASE OF LASER SPECTROSCOPIC EQUIPMENT (CHE-8109582); 12 MONTHS \$63,700

WAGNER, PETER J.; MODEL STUDIES ON LIGHT-INDUCED ENERGY MIGRATION IN CHEMICALS (CHE-8202404); 12 MONTHS \$93,400

CHANG, CHI K.; CATALYTIC AND BIOMIMETIC APPLICATIONS OF PORPHYRINS AND STACKED MACROCYCLES (CHE-8210200); 12 MONTHS \$58,094

UNIVERSITY OF MICHIGAN-ANN ARBOR

PHILLIPS, GEORGE D.; DIFFUSION OF MACROMOLECULES UNDER NON-CLASSICAL CONDITIONS (CHE-7920389 A02*); 12 MONTHS \$15,500

BARTELL, LAWRENCE S.; MOLECULAR STRUCTURE AND FORCE FIELDS: ELECTRON DIFFRACTION STUDIES OF GASEOUS MOLECULES (CHE-7926480 A02); 12 MONTHS \$103,130

KUCZKOWSKI, ROBERT L.; CHEMICAL APPLICATIONS OF MICROWAVE SPECTROSCOPY (CHE-8005471 A02); 12 MONTHS \$76,000

WUTS, PETER G.; FUNCTIONALIZED ALLYLBORANES IN THE SYNTHESIS OF NATURAL PRODUCTS (CHE-8019770 A01); 12 MONTHS \$19,200

GROVES, JOHN T.; METAL-OXO AND METAL-PEROXO INTERMEDIATES IN OXIDATIVE CATALYSIS (CHE-8106064 A01); 12 MONTHS \$80,342

MEYERHOFF, MARK E.; ANALYTICAL STUDIES OF BINDING PROTEIN INTERACTIONS WITH ENZYME-LIGAND CONJUGATES (CHEMISTRY) (CHE-8118817); 12 MONTHS \$50,000

FRANCIS, ANTHONY H.; PHOTO-THERMAL SPECTROSCOPY OF SURFACE ADSORBATES (CHEMISTRY) (CHE-8200857); 12 MONTHS \$70,000

CURTIS, M. DAVID; CHEMISTRY OF METAL-METAL MULTIPLE BONDS (CHE-8206153); 12 MONTHS \$53,300

SATTELBERGER, ALFRED P.; METAL-METAL BONDED COMPLEXES OF THE EARLY TRANSITION METALS (CHE-8206169); 12 MONTHS \$54,900

WAYNE STATE UNIVERSITY

BRENNER, ALAN; AN INFRARED SPECTROSCOPIC STUDY OF ADSORBED TRANSITION METAL COMPLEXES (CHEMISTRY) (CHE-8005400 A02); 12 MONTHS \$41,000

ENDICOTT, JOHN F.; THE PHOTOCHEMISTRY OF COORDINATION COMPLEXES (CHEMISTRY) (CHE-8005497 A02); 12 MONTHS \$65,000

BACH, ROBERT D.; EXPERIMENTAL AND THEORETICAL STUDIES OF CARBONYL MIGRATIONS AND OTHER REACTION MECHANISMS (CHEMISTRY) (CHE-8006520 A02); 11 MONTHS \$60,000

JOHNSON, CARL R.; SYNTHETIC CHEMISTRY BASED ON SULFOXIMINES AND THIOPHOSPHONATES (CHE-8009140 A02); 12 MONTHS \$71,900

GLICK, MILTON D. AND LINTVEDT, RICHARD L.; SYNTHESIS, STRUCTURE, MAGNETISM AND REACTIVITY OF MULTI-NUCLEAR TRANSITION METAL COMPLEXES (CHEMISTRY) (CHE-8010809 A02); 12 MONTHS \$55,000

COLEMAN, DAVID M.; SPECTROSCOPIC STUDIES OF SEGREGATED SAMPLING/EXCITATION LUMINOUS ANALYTICAL DISCHARGES (CHE-8016148 A01); 12 MONTHS \$55,000

COLEMAN, DAVID M.; SPECTROSCOPIC STUDIES OF SEGREGATED SAMPLING/EXCITATION LUMINOUS ANALYTICAL DISCHARGES (CHE-8016148 A02); \$8,400

OLIVER, JOHN P.; ORGANOSYLLMETALLIC COMPOUNDS: STRUCTURAL, SPECTROSCOPIC AND CHEMICAL STUDIES INCLUDING THEIR POTENTIAL USE AS SILYLENE PRESURSORS (CHE-8016862 A02); 12 MONTHS \$60,100

HASE, WILLIAM L.; COMPUTER SIMULATION OF CHEMICAL DYNAMICS (CHE-8109265 A01); 12 MONTHS \$51,741

LIM, EDWARD C.; EXCITED-STATE DYNAMICS AND ENERGETICS OF ULTRACOLD GASEOUS MOLECULES (CHE-8119202); 12 MONTHS \$105,000

MINNESOTA

UNIVERSITY OF MINNESOTA-INSTITUTE OF TECHNOLOGY

FRISTAD, WILLIAM E.; MANGANESE(III) SPECIFIC OXIDATIVE CYCLIZATION (CHEMISTRY) (CHE-8204420); 12 MONTHS \$40,998

UNIVERSITY OF MINNESOTA

KREEVOY, MAURICE M.; THE EFFECT OF MEDIUM AND STRUCTURE ON PROTON AND HYDRIDE TRANSFER (CHE-7925990 A02); 12 MONTHS \$53,100

MEAD, C. ALDEN; THE MOLECULAR AHARONOV-BOHM EFFECT AND ITS ROLE IN QUANTUM CHEMISTRY (CHE-8008335 A02); 12 MONTHS \$50,000

TRUHLAR, DONALD G.; SCATTERING THEORY AND CALCULATIONS FOR CHEMICAL REACTIONS AND ELECTRON IMPACT PROCESSES (CHE-8025232 A01); 12 MONTHS \$70,000

GLADFELTER, WAYNE L.; SYNTHESIS AND REACTIVITY OF NITROSYL CARBONYL CLUSTERS (CHE-8106096 A01); 12 MONTHS \$41,721

PIGNOLET, LOUIS H.; CATALYTIC REACTIONS OF ORGANOMETALLIC AND METALLOSULFUR COMPOUNDS (CHE-8108490); 12 MONTHS \$58,500

GASSMAN, PAUL G.; STUDIES OF HIGHLY REACTIVE MOLECULES AND INTERMEDIATES (CHE-8114772); 12 MONTHS \$103,134

OVEREND, JOHN; THE DEVELOPMENT AND TESTING OF ANHARMONIC FORCE FIELDS FOR SIMPLE MORE-THAN-TRIATOMIC MOLECULES (CHE-8115695); 20 MONTHS \$61,500

MILLER, ESSIE K.; ORGANIC ELECTROREDUCTIONS, SYNTHESIS AND THE ROLE OF TETRAALKYLAMMONIUM IONS (CHE-8117517); 12 MONTHS \$55,060

KOLTHOFF, IZAAK M.; APPLICATIONS OF CROWN ETHERS AND CRYPTANDS IN CHEMICAL ANALYSIS (CHE-8119680); 12 MONTHS \$35,224

DAHLER, JOHN S.; KINETIC THEORY OF POLYATOMIC AND CHEMICALLY REACTIVE FLUIDS (CHEMISTRY) (CHE-8121107); 12 MONTHS \$51,000

MILLER, LARRY L.; ORGANIC PLASMA CHEMISTRY (CHE-8122062); 12 MONTHS \$65,024

MILLER, LARRY L.; ORGANIC ELECTROCHEMISTRY (CHE-8203493); 12 MONTHS \$79,563

CARR, PETER W.; THE APPLICATION OF SOLVATOCHROMIC PHENOMENA TO SOLUTE-SOLVENT INTERACTIONS IN CHROMATOGRAPHY AND SEPARATION SCIENCE (CHE-8205187); 12 MONTHS \$83,583

GENTRY, WILLIAM R. AND GIESE, CLAYTON F.; QUANTUM DYNAMICS OF MOLECULAR INTERACTIONS (CHEMISTRY) (CHE-8205769); 12 MONTHS \$180,000

ELLIS, JOHN E.; THE SYNTHESIS AND CHEMISTRY OF ORGANOMETALLIC ANIONS (CHE-8210496); 12 MONTHS \$58,000

UNIVERSITY OF MINNESOTA AT SAINT PAUL

DAHLER, JOHN S.; THEORY OF HIGH-ENERGY ION-ATOM AND ATOM-ATOM COLLISIONS (CHE-7914174 A02); 12 MONTHS \$43,800

MISSISSIPPI

UNIVERSITY OF MISSISSIPPI

HUSSEY, CHARLES L.; ELECTROCHEMICAL STUDIES OF SELECTED TRANSITION METAL SOLUTES IN ROOM TEMPERATURE CHLOROALUMINATE MELTS (CHE-8025235); 12 MONTHS \$40,000

PARCHER, JON F.; APPLICATIONS OF FRONTAL CHROMATOGRAPHY TO MULTICOMPONENT SYSTEMS (CHE-8207756); 12 MONTHS \$87,000

MISSOURI

UNIVERSITY OF MISSOURI, COLUMBIA

SCHLEMPER, ELMER O.; SHORT HYDROGEN BONDS: NEUTRON, GAMMA AND X-RAY; OTHER EXPERIMENTAL STUDIES; AND THEORETICAL CORRELATIONS (CHEMISTRY) (CHE-8106795 A01); 12 MONTHS \$35,000

WONG, TUCK C.; A NUCLEAR MAGNETIC RESONANCE INVESTIGATION OF THE DYNAMICS AND ORDERING OF WATER IN CELLULOSE (CHEMISTRY) (CHE-8115327 A01); 12 MONTHS \$23,000

KOIRTYOHANN, S. R.; HIGH RESOLUTION PROFILING AS A MEANS OF STUDYING FUNDAMENTAL PARAMETERS IN THE INDUCTIVELY COUPLED PLASMA (CHE-8205676); 18 MONTHS \$75,919

UNIVERSITY OF MISSOURI, ROLLA

BERTRAND, GARY L.; DEVELOPMENT OF A GROUP-CONSTRUCTION METHOD FOR PREDICTING SOLUBILITIES IN COMPLEX SYSTEMS (CHEMISTRY) (CHE-7921534 A02); 12 MONTHS \$21,500

WASHINGTON UNIVERSITY

WAHL, ARTHUR C.; OXIDATION-REDUCTION REACTIONS (CHEMISTRY) (CHE-8003325 A02); 12 MONTHS \$60,000

GASPAR, PETER P.; MECHANISMS OF CHEMICAL REACTIONS OF CARBENES (CHE-8019638 A01); 12 MONTHS \$59,400

WEISSMAN, SAMUEL I.; DYNAMICS OF CHEMICAL PROCESSES: TIME RESOLVED MAGNETIC RESONANCE (CHE-8120006); 12 MONTHS \$50,059

ACKERMAN, JOSEPH J.; MULTINUCLEAR MAGNETIC RESONANCE OF SUPERCOOLED SOLUTIONS (CHEMISTRY) (CHE-8200230); 12 MONTHS \$58,000

MONTANA

MONTANA STATE UNIVERSITY

ABBOTT, EDWIN H.; PURCHASE OF A VERSATILE MASS SPECTROMETRY SYSTEM (CHE-8115565); 12 MONTHS \$127,100

GRIMSRUD, ERIC P.; A STUDY OF ATMOSPHERIC PRESSURE IONIZATION PROCESSES WITHIN SIMPLE IONIZATION DETECTORS (CHE-8119857); 12 MONTHS \$90,127

UNIVERSITY OF MONTANA

FIELD, RICHARD J.; OSCILLATING CHEMICAL REACTIONS (CHE-8023755 A01); 12 MONTHS \$51,600

NEBRASKA

UNIVERSITY OF NEBRASKA AT LINCOLN

RIEKE, REUBEN D.; ELECTROCHEMISTRY OF ORGANOMETALLIC COMPLEXES AND HIGHLY CONDUCTING ORGANIC MATERIALS (CHE-7806661 A05); 12 MONTHS \$82,000

BURROW, PAUL D.; ELECTRON SCATTERING STUDIES OF TEMPORARY ANION FORMATION IN HYDROCARBONS (CHE-7916816 A02); 12 MONTHS \$50,000

GROSS, MICHAEL L.; SELECTION RULES FOR IONIC CYCLOADDITIONS, ISOMERIZATIONS, AND DECOMPOSITIONS (CHE-8008008 A01); 12 MONTHS \$35,000

GEORGE, T. ADRIAN; CHEMISTRY OF COORDINATED DINITROGEN (CHE-8011423 A02); 12 MONTHS \$45,300

WILKINS, CHARLES L. AND GROSS, MICHAEL L.; FOURIER TRANSFORM MASS SPECTROMETRY (CHEMISTRY) (CHE-8018245 A01); 10 MONTHS \$80,000

STALEY, STUART W.; CARBANION CHEMISTRY (CHE-8110428 A01; 12 MONTHS \$77,300

NEVADA

UNIVERSITY OF NEVADA, RENO

SCOTT, LAWRENCE T.; UNDERSTANDING CYCLIC CONJUGATION (CHEMISTRY) (CHE-8206899; 12 MONTHS \$57,898

NEW HAMPSHIRE

DARTMOUTH COLLEGE

LEMAL, DAVID M.; SYNTHESIS AND CHEMISTRY OF PERFLUORINATED ANNULENES AND THEIR RELATIVES (CHE-7924309 A02; 12 MONTHS \$63,211

HUGHES, RUSSELL P.; TRANSITION METAL COMPLEXES DERIVED FROM THREE-MEMBERED RINGS (CHE-8022854 A01; 12 MONTHS \$43,000
SODERBERG, ROGER H.; PURCHASE OF A HIGH FIELD NUCLEAR MAGNETIC RESONANCE SPECTROMETER (CHEMISTRY) (CHE-8207177; 12 MONTHS \$147,000

UNIVERSITY OF NEW HAMPSHIRE, DURHAM

ANDERSEN, KENNETH K.; MECHANISMS OF NUCLEOPHILIC SUBSTITUTION AT SULFUR (CHE-7906999 A02; 12 MONTHS \$37,600

SEITZ, W RUDOLF; ANALYTICAL REACTIONS BASED ON FLUORESCENCE POLARIZATION (CHE-8025568 A01; 12 MONTHS \$32,683

SEITZ, W RUDOLF; SENSORS BASED ON IMMOBILIZED FLUORIGENIC REAGENTS (CHE-8206151; 12 MONTHS \$32,454

NEW JERSEY

PRINCETON UNIVERSITY

TAYLOR, EDWARD C.; THALLIUM IN ORGANIC SYNTHESIS (CHE-7918676 A02; 12 MONTHS \$73,065

MISLOW, KURT; THEORETICAL STEREOCHEMISTRY (CHE-8009670 A02; 14 MONTHS \$168,000

JONES, MAITLAND; REACTIVE INTERMEDIATES (CHEMISTRY) (CHE-8101212 A01; 12 MONTHS \$91,900

SPIRO, THOMAS G.; RESONANCE EFFECTS IN SPONTANEOUS AND COHERENT RAMAN SPECTROSCOPY (CHE-8106084; 12 MONTHS \$75,000

HALL, CAROL K.; STATISTICAL THEORY OF THE PHASE-CHANGE BEHAVIOR OF METALHYDROGEN SYSTEMS (CHEMISTRY) (CHE-8109557 A01; 12 MONTHS \$28,200

GELFAND, JACK J. MILES, RICHARD B. AND RABITZ, HERSHEL A.; JOINT EXPERIMENTAL AND THEORETICAL INVESTIGATION OF COLLISIONAL RELAXATION AND CHEMICAL DYNAMICS OF HIGHLY VIBRATIONALLY EXCITED MOLECULES (CHE-8116985; 12 MONTHS \$120,000

SCHWARTZ, JEFFREY; TRANSITION METAL REAGENTS IN ORGANIC SYNTHESIS (CHE-8121606; 12 MONTHS \$104,800

SEMELHACK, MARTIN F.; NEW METHODS IN ORGANIC SYNTHESIS USING TRANSITION METALS (CHE-8204339; 12 MONTHS \$78,184

BERNASEK, STEVEN L.; THE ENERGY STATE OF HETEROGENEOUS REACTION PRODUCTS (CHEMISTRY) (CHE-8206428; 12 MONTHS \$90,000

MC CLURE, DONALD S.; ELECTRONIC SPECTROSCOPY AND PHOTO-CHEMISTRY IN THE CRYSTALLINE STATE (CHE-8210889; 12 MONTHS \$79,964

RUTGERS UNIVERSITY-BUSCH CAMPUS

MOSS, ROBERT A.; MECHANISTIC STUDIES IN CARBENE CHEMISTRY (CHE-7908602 A02; 12 MONTHS \$72,200

DENNEY, DONALD B.; PREPARATION AND STUDIES OF HYPERVALENT MOLECULES (CHE-8018579 A01; 12 MONTHS \$46,277

HARTWICK, RICHARD A.; DEVELOPMENT AND CHARACTERIZATION OF WELL-DEFINED MIXED-MODE STATIONARY PHASES FOR HIGH PERFORMANCE LIQUID CHROMATOGRAPHY (CHE-8100224; 12 MONTHS \$60,000

RUTGERS UNIVERSITY

GOODMAN, LIONEL; VIBRATIONAL-ELECTRONIC INTERACTIONS IN ONE- AND TWO-PHOTON SPECTRA (CHEMISTRY) (CHE-8003299 A02; 12 MONTHS \$55,071

SAN FILIPPO, JOSEPH; ODD-ELECTRON INTERMEDIATES AND PATHWAYS IN SELECTED ORGANOMETALLIC PROCESSES (CHE-8017045 A01; 12 MONTHS \$50,000

YACNYCH, ALEXANDER M.; POLYMER-FILM CHEMICALLY MODIFIED ELECTRODES AS POTENTIOMETRIC SENSORS (CHE-802237 A01; 12 MONTHS \$34,000

NEW MEXICO

NEW MEXICO STATE UNIVERSITY

WILKINS, RALPH G.; RAPID INORGANIC REACTIONS IN SOLUTION (CHE-8019579 A01; 12 MONTHS \$51,000

NEW YORK

AMERICAN CRYSTALLOGRAPHIC ASSOCIATION

SPARKS, ROBERT A. AND DAHL, LAWRENCE F.; CRYSTALLOGRAPHY IN RESEARCH INSTITUTIONS (CHE-8304058; 12 MONTHS \$11,500

CITY COLLEGE

CALLENDER, ROBERT H.; RESONANCE RAMAN STUDIES OF BIOLOGICAL CHROMOPHORES (PCM-8302840; 12 MONTHS \$10,000

CLARKSON COLLEGE OF TECHNOLOGY

KERKER, MILTON; ELASTIC AND INELASTIC SCATTERING BY SMALL PARTICLES (CHEMISTRY) (CHE-8011444 A01; 12 MONTHS \$75,000

MATJUEVIC, BOON; INTERACTIONS OF COMPLEX SOLUTE SPECIES WITH CHARGED INTERFACES (CHEMISTRY) (CHE-8019884 A02; 12 MONTHS \$95,000

MEITES, LOUIS, AND ZUMAN, PETR; COMPILATION, CRITICAL EVALUATION AND PUBLICATION OF POLAROGRAPHIC AND RELATED ELECTROCHEMICAL DATA (CHE-8026035; 12 MONTHS \$104,182

MEITES, LOUIS; THERMOMETRIC TECHNIQUES FOR STUDYING CHEMICAL EQUILIBRIA AND CHEMICAL KINETICS (CHE-8106103; 12 MONTHS \$47,274

FENDLER, JANOS H.; MEMBRANE MIMETIC CHEMISTRY (CHE-8119894; 12 MONTHS \$92,000

COLLEGE OF ENVIRONMENTAL SCIENCE AND FORESTRY

SCHUERCH, CONRAD; THE REACTIVITY OF CARBOHYDRATE LIGANDS IN METAL CHELATES (CHE-8002405; 01; 12 MONTHS \$31,900

SARKO, ANATOLE; CONFORMATIONAL ANALYSIS OF POLYSACCHARIDES (CHEMISTRY) (CHE-8107534 A01; 12 MONTHS \$30,000

SMID, JOHANNES; MACROHETEROCYCLIC AND ACYCLIC LIGANDS ANCHORED TO LINEAR AND NETWORK POLYMERS. SOLUTE BINDING AND CATALYSIS (CHEMISTRY) (CHE-8205881; 12 MONTHS \$33,000

COLUMBIA UNIVERSITY

FLYNN, GEORGE W.; LASER STUDIES OF ENERGY FLOW IN POLYATOMIC MOLECULES (CHE-8023747 A01; 12 MONTHS \$80,000

STILL, W. C.; STEREOCONTROL IN ORGANIC SYNTHESIS (CHE-8103030 A01; 12 MONTHS \$93,800

KATZ, THOMAS J.; CATALYSIS BY METALS (CHE-8108998 A01; 12 MONTHS \$97,600

LIPPARD, STEPHEN J.; LIGAND BRIDGED BIMETALLIC COMPLEXES AND HIGH COORDINATE METAL ISOCYANIDE CHEMISTRY (CHE-8109390 A01; 12 MONTHS \$12,394

BRESLOW, RONALD; SELECTIVE FUNCTIONALIZATIONS OF SYNTHETIC UTILITY (CHE-8110286 A01; 12 MONTHS \$66,511

NAKANISHI, KOJI, AND BALOGH-NAIR, VALERIA; SYNTHETIC AND BIOORGANIC STUDIES OF BACTERIORHODOPSIN (CHE-8110505; 12 MONTHS \$100,000

STORK, GILBERT; SYNTHETIC METHODS AND TOTAL SYNTHESIS IN ORGANIC CHEMISTRY (CHE-8115445 A01; 12 MONTHS \$181,714

FLYNN, GEORGE W.; MOLECULAR BEAM KINETICS: LASER AUGMENTED STUDIES (CHEMISTRY) (CHE-8116386 A02; \$32,321

PECHUKAS, PHILIP; THEORETICAL STUDIES IN MOLECULAR DYNAMICS (CHE-8117923; 12 MONTHS \$86,860

BRESLOW, RONALD; ORGANIC ELECTROCHEMISTRY AND CONJUGATION (CHE-8120186; 12 MONTHS \$100,800

BERSON, RICHARD; ENERGY DISTRIBUTION OF PHOTOFRAGMENTS (CHE-8120399; 12 MONTHS \$45,000

TURRO, NICHOLAS J.; GENERATION AND CHEMISTRY OF ELECTRONICALLY EXCITED MOLECULES (CHE-8120730; 12 MONTHS \$182,600

EISENTHAL, KENNETH B.; PICOSECOND LASER STUDIES OF EXCITED STATE PROCESSES (CHE-8121945; 12 MONTHS \$74,000

BERNE, BRUCE J.; MOLECULAR DYNAMICS AND MONTE CARLO STUDIES OF CLASSICAL AND QUANTUM SYSTEMS (CHE-8201835; 12 MONTHS \$125,000

TURRO, NICHOLAS J.; PURCHASE OF A NUCLEAR MAGNETIC RESONANCE SPECTROMETER (CHEMISTRY) (CHE-8211121; 12 MONTHS \$105,000

CORNELL UNIVERSITY

WIDOM, BENJAMIN; THEORETICAL & EXPERIMENTAL STUDIES OF PHASE EQUILIBRIUM IN FLUIDS (CHE-7909689 A03; 12 MONTHS \$93,000

MC LAFFERTY, FRED W.; COMPUTER IDENTIFICATION OF UNKNOWN MASS SPECTRA (CHE-7910400 A02; 12 MONTHS \$47,500

GRANT, EDWARD R.; TIME RESOLVED STUDIES OF UNIMOLECULAR DECOMPOSITION: DISSOCIATION DYNAMICS FOR ALCOHOLS, THIOLS AND AMINES (CHE-7920858 A02; 12 MONTHS \$35,000

GOLDSTEIN, MELVIN J.; STRUCTURE AND MECHANISM IN CYCLOBUTANE PYROLYSIS (CHE-7923217 A02; 12 MONTHS \$59,200

WIENFELD, JOHN R.; DISSOCIATIVE AND COLLISIONAL BEHAVIOR IN METAL HALIDES (CHE-8004125 A02; 12 MONTHS \$67,859

PORTER, RICHARD F.; ION MICROSCOPY AND ION MICROPROBE ANALYSIS (CHE-8005983 A01; 12 MONTHS \$107,700

HOUSTON, PAUL L.; LASER STUDIES OF MOLECULAR PHOTODISSOCIATION DYNAMICS IN NOZZLE BEAMS (CHE-8013691 A01; 12 MONTHS \$50,000

FREED, JACK H.; MOLECULAR RELAXATION BY ESR SPECTROSCOPY AND RELATED PHENOMENA (CHE-8024124 A01; 12 MONTHS \$68,320

GUBBINS, KEITH E.; STATISTICAL MECHANICS OF MOLECULAR LIQUID INTERFACES (CHEMISTRY) (CHE-8109502 A01; 12 MONTHS \$33,873

CARPENTER, BARRY K.; MECHANISMS OF METALLACYCLOPENTADIENE REACTIONS (CHE-8113088; 12 MONTHS \$69,000

GOLDSTEIN, MELVIN J.; RELATIONSHIPS BETWEEN TOPOLOGY AND REACTIVITY IN HYDROCARBON CHEMISTRY (CHE-8201052; 12 MONTHS \$73,400

CORNELL UNIVERSITY-CORNELL UNIVERSITY - ENDOWED

HOFFMANN, ROALD; MOLECULAR ORBITAL THEORY OF ORGANIC AND INORGANIC MOLECULES AND THEIR REACTIONS (CHE-7828048 A03; 12 MONTHS \$130,000

BAUER, SIMON H.; VIBRATION RELAXATION MEASUREMENTS OF DIRECTLY PUMPED TOTALLY SYMMETRIC STATES (CHE-7902804 A02; 12 MONTHS \$32,399

ALBRECHT, ANDREAS C.; NONLINEAR VIBRONIC AND ELECTRONIC SPECTROSCOPY OF MOLECULES IN THE CONDENSED PHASE (CHE-8016536 A01; 12 MONTHS \$1,000

HOFFMANN, ROALD; PURCHASE OF ACCESSORIES FOR A HIGH POWER PULSED LASER SYSTEM FOR RESEARCH INTO CHEMICAL REACTIONS (CHE-8205880; 12 MONTHS \$24,500

HUNTER COLLEGE

BEVERIDGE, DAVID L. *B-BODY EFFECTS ON THE STRUCTURE AND PROPERTIES OF WATER* (CHEMISTRY) (CHE-8203501); 12 MONTHS \$33,019

MEDICAL FOUNDATION OF BUFFALO INC

DORSET, DOUGLAS L. *ELECTRON DIFFRACTION CRYSTAL STRUCTURE ANALYSIS OF ORGANIC MOLECULES* (CHE-8116318*); 12 MONTHS \$73,000

HAUPTMAN, HERBERT A. *METHODS OF CRYSTAL AND MOLECULAR STRUCTURE DETERMINATION* (CHEMISTRY) (CHE-8203930); 12 MONTHS \$60,000

NEW YORK UNIVERSITY

MOSKOWITZ, JULES W. *ACCURATE AND COMPACT CORRELATION FUNCTIONS FOR MANY ELECTRON ATOMIC AND MOLECULAR SYSTEMS* (CHE-8010719 A02); 12 MONTHS \$45,805

PERCUS, JEROME K. *STUDIES ON NON-UNIFORM FLUIDS* (CHEMISTRY) (CHE-8011285 A02); 12 MONTHS \$41,000

DELAHAY, PAUL. *PHOTOELECTRON EMISSION SPECTROSCOPY OF LIQUIDS AND SOLUTIONS* (CHE-8100143 A01); 12 MONTHS \$40,000

LOW, MANFRED J. *ACTIVE SILICEOUS SURFACES* (CHEMISTRY) (CHE-8111778 A01); 12 MONTHS \$48,000

POLYTECHNIC INSTITUTE OF NEW YORK

PETRUCCI, SERGIO. *FACTORS THAT AFFECT THE MECHANISM AND DISSOCIATION OF CROWNETHERS WITH CLOSED-SHELL CATIONS* (CHE-8108467); 12 MONTHS \$78,000

QUEENS COLLEGE

LOCKE, DAVID C. AND SWEENEY, WILLIAM V. *ACQUISITION OF HIGH FIELD FOURIER TRANSFORM NMR* (PCM-8111745*); 12 MONTHS \$50,000

RENSSELAER POLYTECHNIC INSTITUTE

SCHULTZ, ARTHUR G. AND STRONG, ROBERT L. *MECHANISM AND SCOPE OF ARYLOXYACETIC ACID-LIKE PHOTOREARRANGEMENTS* (CHE-7923640 A02); 12 MONTHS \$51,000

FERRIS, JAMES P. *OXIDATIVE AND PHOTOCONDENSATION OF PEP-TIDE AND NUCLEOTIDE BONDS USING HCN AND HCN OLIGOMERS* (CHEMISTRY) (CHE-7924364 A02); 12 MONTHS \$37,600

HUDSON, JOHN B. *THE ROLE OF PRECURSOR SPECIES IN HETEROGENEOUS CHEMICAL REACTIONS* (CHE-8018246 A01); 12 MONTHS \$40,000

SCHULTZ, ARTHUR G. *WORKSHOPS ON ORGANIC SYNTHESIS AND NATURAL PRODUCTS CHEMISTRY, SUMMERS 1982, 1983 AND 1984* (CHE-8200692); 36 MONTHS \$41,795

ROCKEFELLER UNIVERSITY

AGOSTA, WILLIAM C. AND WOLFF, STEPHEN. *STRUCTURAL AND STEREOCHEMICAL EFFECTS IN CARBONYL PHOTOCHEMISTRY. RELATED STUDIES OF RADICALS AND CARBENES* (CHE-8023349 A01); 12 MONTHS \$81,400

BALLARD, STEPHEN G. AND MAUZERALL, DAVID C. *PHOTO-INDUCED ELECTRON TRANSFER IN SOLUTION AND IN ORDERED SYSTEMS* (CHE-8117549); 12 MONTHS \$66,000

STATE UNIVERSITY AT ALBANY

KUIVILA, HENRY G. *MECHANISTIC AND EXPLORATORY ORGANOTIN CHEMISTRY* (CHE-8105021 A01); 12 MONTHS \$58,400

GILLISPIE, GREGORY D. *LASER SPECTROSCOPY STUDIES OF INTRAMOLECULAR HYDROGEN BONDING AND EXCITED STATE PROTON TRANSFER* (CHEMISTRY) (CHE-8111960 A01); 12 MONTHS \$9,200

BLOCK, ERIC. *STUDIES IN ORGANOSULFUR CHEMISTRY. NEW SULFONE CHEMISTRY* (CHE-8115308 A01); 12 MONTHS \$46,208

STATE UNIVERSITY AT BINGHAMTON

EISCH, JOHN J. *STEREOCHEMISTRY AND MECHANISMS OF ORGANOMETALLIC INSERTION AND REARRANGEMENT REACTIONS WITH UNSATURATED HYDROCARBONS* (CHE-7918188 A02); 12 MONTHS \$48,000

INNES, K. KEITH. *MOLECULAR ELECTRONIC SPECTRA AND STRUCTURE* (CHE-8109484 A01); 12 MONTHS \$55,816

STATE UNIVERSITY AT BUFFALO

COPPENS, PHILIP. *CHARGE DENSITIES IN SOLIDS BY X-RAY AND NEUTRON DIFFRACTION* (CHEMISTRY) (CHE-7905897 A03); 12 MONTHS \$110,573

OSTERYOUNG, ROBERT A. AND OSTERYOUNG, JANET. *ANALYTICAL PULSE VOLTAMMETRY* (CHE-7917543 A03); 12 MONTHS \$185,000

CHURCHILL, MELVYN R. *STRUCTURAL STUDIES IN ORGANOMETALLIC AND BORON CHEMISTRY* (CHE-8023448 A01); 12 MONTHS \$37,500

LANSBURY, PETER T. *NOVEL STRATEGIES IN NATURAL PRODUCTS SYNTHESIS* (CHE-8026586 A01); 12 MONTHS \$53,500

BEACHLEY, O. T. *THE CHEMISTRY OF NUCLEOPHILIC ORGANOMETALLIC ANIONS* (CHE-8103316 A01); 12 MONTHS \$46,679

MARINSKY, JACOB A. *AN ANALYSIS OF COMPLICATING FACTORS IN THE EQUILIBRIA OF HUMIC ACID SUBSTANCES* (CHE-8113508); 12 MONTHS \$39,971

KEISTER, JEROME B. *HYDRIDE TRANSFER REACTIONS OF METHYLDYNETRIHYDRIDOTRIMETALLIC CLUSTERS* (CHEMISTRY) (CHE-8121059); 12 MONTHS \$50,000

STATE UNIVERSITY AT STONY BROOK

LE NOBLE, WILLIAM J. *VOLUME PROFILES OF CHEMICAL PROCESSES* (CHE-8021063 A01); 12 MONTHS \$76,700

FOWLER, FRANK W. *NEW APPROACHES TO THE SYNTHESIS OF NITROGEN HETEROCYCLES* (CHE-8106040 A01); 12 MONTHS \$45,246

FRIEDMAN, HAROLD L. *ION DISTRIBUTIONS IN SOLUTION* (CHE-8108239 A01); 12 MONTHS \$55,000

PRESTWICH, GLENN D. *ISOPRENOID BIOSYNTHESIS BY INSECTS* (CHEMISTRY) (CHE-8110293 A01); 12 MONTHS \$35,626

JOHNSON, PHILIP M. *DETERMINATION OF MOLECULAR EXCITED STATE PROPERTIES BY MULTIPHOTON IONIZATION SPECTROSCOPY* (CHE-8111563 A01); 12 MONTHS \$45,000

CHU, BENJAMIN. *PURCHASE OF A MULTINUCLEAR, HIGH-FIELD, NUCLEAR MAGNETIC RESONANCE SPECTROMETER* (CHE-8114412); 12 MONTHS \$157,000

STELL, GEORGE. *STATISTICAL MECHANICS OF THE LIQUID STATE* (CHE-8119143); 12 MONTHS \$59,998

HELQUIST, PAUL. *ORGANOMETALLIC ALKYLIDENE TRANSFER REAGENTS* (CHEMISTRY) (CHE-8120466); 12 MONTHS \$45,685

LAUHER, JOSEPH W. *NEW APPROACHES TO BIMETALLIC CLUSTERS AND CATALYSIS* (CHE-8120728); 12 MONTHS \$45,600

HAIM, ALBERT. *THERMAL AND PHOTOCHEMICAL ELECTRON TRANSFER REACTIONS OF TRANSITION METAL COMPLEXES* (CHEMISTRY) (CHE-8203887); 11 MONTHS \$68,100

WHITTEN, JERRY L. *INTERNATIONAL DISCUSSION MEETING ON ELECTRONIC STRUCTURE AND DYNAMICS OF PROCESSES ON SOLID SURFACES* (CHEMISTRY) OCTOBER 24-27, 1982 NEW YORK (CHE-8209008); 12 MONTHS \$12,600

SYRACUSE UNIVERSITY

NAFIE, LAURENCE A. *VIBRATIONAL CIRCULAR DICHROISM SPECTROSCOPY* (CHE-8005227 A02); 12 MONTHS \$54,000

LEVY, GEORGE C. *MULTI-FIELD MULTI-NUCLEI NMR SPECTROSCOPY* (CHEMISTRY) (CHE-8105109 A01*); 12 MONTHS \$27,500

ATKINSON, GEORGE H. *WORKSHOP ON TIME-RESOLVED VIBRATIONAL SPECTROSCOPY, BLUE MOUNTAIN LAKE, NEW YORK, AUGUST 20-22, 1982* (CHEMISTRY) (CHE-8120740); 12 MONTHS \$6,000

UNIVERSITY OF ROCHESTER

SAUNDERS, W. H. *ISOTOPE EFFECTS IN ELIMINATIONS AND OTHER PROTON TRANSFER REACTIONS* (CHE-7920774 A02); 12 MONTHS \$65,300

EISENBERG, RICHARD. *HOMOGENEOUS CATALYSIS OF THE WATER GAS SHIFT REACTION, ITS APPLICATIONS, AND CARBON-HYDROGEN BOND ACTIVATION* (CHE-8011974 A02); 12 MONTHS \$79,500

MUENTER, JOHN S. *STRUCTURE AND DYNAMICS OF LASER EXCITED AND WEAKLY BOUND SPECIES* (CHE-8012723 A02); 12 MONTHS \$93,000

GEORGE, THOMAS F. *THEORETICAL STUDIES OF LASER-INDUCED CHEMIONIZATION* (CHE-8022874 A01); 12 MONTHS \$50,922

PERRY, DAVID S. *COLLISIONLESS DYNAMICS OF VIBRATIONALLY EXCITED POLYATOMIC MOLECULES* (CHE-8023217 A01); 12 MONTHS \$47,000

FARRAR, JAMES M. *MULTIPHOTON IONIZATION STUDY OF ASSOCIATIVE DETACHMENT REACTIONS* (CHE-8109559 A01); 12 MONTHS \$45,490

BOECKMAN, ROBERT K. *STUDIES OF METHODOLOGY FOR AND APPLICATIONS TO THE TOTAL SYNTHESIS OF NATURAL PRODUCTS* (CHE-8119823); 12 MONTHS \$45,600

NORTH CAROLINA

DUKE UNIVERSITY

ARNETT, EDWARD M. *ENERGETIC AND STEREOCHEMICAL STUDIES OF ALKYL TRANSFER AND ION AGGREGATION* (CHE-8006202 A01); 12 MONTHS \$89,154

PORTER, NED A. *PEROXIDES AND PEROXY RADICALS: A MECHANISTIC STUDY* (CHEMISTRY) (CHE-8026541 A01); 12 MONTHS \$79,800

QUIN, LOUIS D. *SYNTHESIS OF SOME NEW AROMATIC SYSTEMS CONTAINING PHOSPHORUS* (CHE-8106789 A01); 12 MONTHS \$39,747

LOCHMULLER, CHARLES H. *STUDIES RELATED TO SELECTIVITY AND RESOLUTION IN CHROMATOGRAPHY* (CHE-8119600); 12 MONTHS \$75,000

CHESNUT, DONALD B. *PURCHASE OF A FOURIER TRANSFORM INFRARED SPECTROMETER FOR CHEMICAL RESEARCH ON NATURAL PRODUCTS AND MOLECULAR SPECIES ON SURFACES* (CHE-8122107); 12 MONTHS \$45,000

NORTH CAROLINA STATE UNIVERSITY AT RALEIGH

DE ARMOND, M. KEITH. *MULTIPLE STATE EMISSION IN TRANSITION METAL COMPLEXES* (CHE-8014183 A01); 12 MONTHS \$39,000

DE ARMOND, M. KEITH, AND HANCK, KENNETH W. *HETEROGENEOUS ELECTRON TRANSFER OF TRANSITION METAL COMPLEXES* (CHE-8119702); 12 MONTHS \$64,800

UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL

PARR, ROBERT G. *THEORETICAL INVESTIGATIONS OF THE ELECTRONIC STRUCTURE OF MOLECULES* (CHE-7722951 A04); 12 MONTHS \$100,000

WHITTEN, DAVID G. *CONTROL OF PHOTOCHEMICAL REACTIONS THROUGH THE USE OF ORGANIZED MEDIA* (CHE-7823126 A03); 12 MONTHS \$110,000

MURRAY, ROYCE W. *FUNDAMENTAL STUDIES OF ELECTROCHEMICAL PROCESSES. TECHNIQUES, INSTRUMENTATION, CHEMICALLY MODIFIED METAL AND METAL OXIDE ELECTRODES* (CHE-7920114 A02); 12 MONTHS \$141,322

MEYER, THOMAS J. *THE RATIONAL DESIGN OF METAL ION REDOX CATALYSTS* (CHE-8002433 A02); 12 MONTHS \$70,409

MEYER, THOMAS J. *PHOTOCHEMICAL AND ELECTRON TRANSFER REACTIONS OF METAL COMPLEXES* (CHE-8008922 A02); 9 MONTHS \$44,000

HATFIELD, WILLIAM E. *SPIN-SPIN COUPLING IN MAGNETICALLY CONDENSED COMPOUNDS* (CHEMISTRY) (CHE-8009685 A02); 12 MONTHS \$64,600

ELIEL, ERNEST L. *CONFORMATIONAL ANALYSIS AND NMR SPECTROSCOPY. PRINCIPLES AND APPLICATIONS* (CHE-8020388 A01); 12 MONTHS \$75,500

JOHNSON, CHARLES S; STUDIES OF MOLECULAR STRUCTURE AND CHEMICAL RATE PROCESSES BY MEANS OF LASER LIGHT SCATTERING (CHE-8022198 A01); 12 MONTHS \$82,982

DEPRISTO, ANDREW E; QUANTUM NUMBER SCALING THEORIES: I. MATHEMATICAL FOUNDATIONS; II. APPLICATIONS TO MOLECULAR COLLISION PROCESSES (CHE-8023441 A01); 12 MONTHS \$1,000

BURSEY, MAURICE M; COMPUTER APPLICATIONS TO ANALYTICAL CHEMISTRY (CHEMISTRY) (CHE-8026747 A01); 12 MONTHS \$95,004

BUCK, RICHARD P; IONIC TRANSPORT, INCLUDING EQUILIBRIA KINETICS AND ADSORPTION AT LIQUID/LIQUID INTERFACES; RESONANCE & SURFACE ENHANCED-RAMAN SPECTROSCOPY OF SURFACE ADSORBED SPECIES (CHE-8103334 A01); 12 MONTHS \$83,126

BAER, TOMAS; DISSOCIATION AND ISOMERIZATION OF STATE SELECTED IONS (CHE-8106079 A02); 12 MONTHS \$75,000

MURRAY, ROYCE W; PURCHASE OF A LASER SPECTROSCOPY INSTRUMENTATION SYSTEM (CHE-8111047); 12 MONTHS \$73,900

HILLS, RAHAM W; DOUBLE RESONANCE SPECTROSCOPY USING A COLOR CENTER LASER (CHEMISTRY) (CHE-8111391 A01); 12 MONTHS \$68,000

ELIEL, ERNEST L; HIGHLY STEREOSELECTIVE ASYMMETRIC SYNTHESIS (CHEMISTRY) (CHE-8206402); 12 MONTHS \$31,131

NORTH DAKOTA

NORTH DAKOTA STATE UNIVERSITY CENTRAL OFFICE

GILLISPIE, GREGORY D; INTRAMOLECULAR HYDROGEN BONDING AND EXCITED STATE PROTON TRANSFER IN AROMATIC MOLECULES (CHEMISTRY) (CHE-8217021); 14 MONTHS \$25,800

NORTH DAKOTA STATE UNIVERSITY MAIN CAMPUS

HILDERBRANT, RICHARD L; STRUCTURE DETERMINATION BY SPECTROSCOPY AND GAS PHASE ELECTRON DIFFRACTION (CHE-8111739); 12 MONTHS \$32,000

OHIO

CASE WESTERN RESERVE UNIVERSITY

PACKLER, JOHN P; CHEMISTRY OF SULFUR AND YLIDE COORDINATION COMPOUNDS (CHE-8013141 A02); 12 MONTHS \$68,000

DUNBAR, ROBERT C; GAS-PHASE IONS (CHE-8110624 A01); 12 MONTHS \$64,200

NORDLANDER, J; MECHANISMS OF CARBOCATION REACTIONS (CHEMISTRY) (CHE-8204764); 11 MONTHS \$47,000

SALOMON, ROBERT G; HOMOGENEUS CATALYSIS IN ORGANIC SYNTHESIS (CHE-8205122); 12 MONTHS \$59,691

CHARLES F KETTERING FOUNDATION-CHARLES F KETTERING RESEARCH LABORATORY

SCHULTZ, FRANKLIN A; STRUCTURAL EFFECTS ON ELECTROCHEMICAL, SPECTROSCOPIC, AND CATALYTIC PROPERTIES OF TRANSITION METAL COMPLEXES (CHE-8211694); 12 MONTHS \$62,500

KENT STATE UNIVERSITY

GOULD, EDWIN S; ELECTRON TRANSFER REACTIONS IN SOLUTION (CHE-8022881 A01); 12 MONTHS \$38,600

OHIO STATE UNIVERSITY

PAQUETTE, LEO A; SYNTHESIS AND ISOMERIZATION REACTIONS OF NOVEL ALICYCLIC MOLECULES (CHE-7900333 A03); 12 MONTHS \$110,000

PLATZ, MATTHEW S; CHEMISTRY AND SPECTROSCOPY OF HIGH ENERGY INTERMEDIATES (CHE-7900896 A03); 12 MONTHS \$59,000

WOJCICKI, ANDREW; CHEMISTRY OF METAL-CARBON SIGMA BONDS (CHE-7911882 A03); 6 MONTHS \$12,000

SHORE, SHELTON G; SYNTHESIS AND STUDIES OF SELECTED METAL CARBONYL AND METALLOBORANE CLUSTER SYSTEMS (CHE-7918148 A03); 12 MONTHS \$80,000

SHORE, SHELTON G; SYNTHESIS AND STUDIES OF SELECTED METAL CARBONYL AND METALLOBORANE CLUSTER SYSTEMS (CHEMISTRY) (CHE-7918148 A04); \$99,000

PARSON, JOHN M; MOLECULAR BEAM STUDIES OF REACTIONS OF LASER-EXCITED METAL ATOMS WITH GASES USING SPECTROSCOPIC DETECTION OF PRODUCTS (CHE-7921267 A02); 12 MONTHS \$40,000

FRAENKEL, GIDEON; DYNAMICS, SYNTHESIS AND STRUCTURE OF CARBANIONIC SUBSTANCES (CHEMISTRY) (CHE-8007439 A04); 12 MONTHS \$76,700

SWENTON, JOHN S; THE UTILIZATION OF ELECTROCHEMICAL REACTIONS AND ELECTROCHEMICALLY DERIVED PRODUCTS IN ORGANIC SYNTHESIS (CHE-8009229 A02); 12 MONTHS \$58,466

SHECHTER, HAROLD; SINGLE-ATOM PERI-BRIDGED ARENES AND HETARENES; CARBENIC PROCESSES (CHE-8019750 A01); 12 MONTHS \$61,695

KUWANA, THEODORE; STUDY OF MODIFIED CARBON/GRAPHITIC SURFACES FOR ELECTROCATALYSIS (CHEMISTRY) (CHE-8110013 A01); 12 MONTHS \$108,956

BUSCH, DARYLE H; TOTALLY SYNTHETIC HEME PROTEIN MODELS (CHE-8112898 A01); 12 MONTHS \$78,000

MEEK, DEVON W; PURCHASE OF A GAS CHROMATOGRAPH/MASS SPECTROMETER (CHE-8113224); 12 MONTHS \$62,550

HINE, JACK; MULTIPLE HYDROGEN BONDING (CHE-8114770); 12 MONTHS \$58,600

LAUB, RICHARD J; ANALYTICAL AND PHYSICOCHEMICAL STUDIES BY GAS-LIQUID CHROMATOGRAPHY (CHE-8119965); 12 MONTHS \$60,000

MCCREERY, RICHARD L; DIFFRACTIVE SPECTROELECTROCHEMISTRY (CHE-8200165); 12 MONTHS \$69,085

HART, DAVID J; EXPLORATION OF RADICAL ADDITION IN THE SYNTHESIS OF COMPLEX MOLECULES (CHEMISTRY) (CHE-8205875); 12 MONTHS \$36,302

SHAVITT, ISALAH; UNITARY GROUP METHODS FOR THE ELECTRON CORRELATION PROBLEM (CHE-8208973); 6 MONTHS \$12,713

UNIVERSITY OF CINCINNATI

DEUTSCH, EDWARD A; EQUILIBRIUM AND DYNAMIC EFFECT INDUCED BY COORDINATION OF SULFUR, SELENIUM OR TELLURIUM TO ROBUST METAL COMPLEXES (CHE-7926497 A02); 12 MONTHS \$64,170

WILSON, R MARSHAL; THE SYNTHESIS AND CHEMISTRY OF NATURAL PRODUCT PEROXIDE DERIVATIVES: CHEMICAL APPLICATIONS OF THE LASER (CHE-8004235 A02); 12 MONTHS \$53,208

AULT, BRUCE S; MATRIX ISOLATION STUDIES OF ANIONIC CHEMICAL INTERMEDIATES (CHE-8100119 A01); 12 MONTHS \$39,700

AULT, BRUCE S; MATRIX ISOLATION STUDIES OF ANIONIC CHEMICAL INTERMEDIATES (CHE-8100119 A02); \$31,823

MARK, JR, HARRY B; ELECTRICAL-CONDUCTING LOW DIMENSIONAL MATERIALS AS ELECTRODES AND THEIR APPLICATIONS TO ELECTROCATALYSIS (CHE-8205873); 12 MONTHS \$116,640

OKLAHOMA

OKLAHOMA STATE UNIVERSITY

PURDIE, NEIL; ANALYTICAL MEASUREMENTS USING OPTICAL DICHROISM (CHE-7909388 A02); 12 MONTHS \$33,457

MOTTOLA, HORACIO A; USE OF TRANSIENT EFFECTS FOR CHEMICAL ANALYSIS (CHE-7923956 A02); 12 MONTHS \$50,261

HOLT, SMITH L; CHEMICAL PROCESSES IN MICROEMULSIONS (CHE-8025726 A01); 12 MONTHS \$49,600

DEVLIN, J PAUL; SPECTROSCOPIC STUDIES OF THE STRUCTURES AND DYNAMICS OF IONIC SYSTEMS (CHEMISTRY) (CHE-8209702); 12 MONTHS \$52,863

UNIVERSITY OF OKLAHOMA NORMAN CAMPUS

CHRISTIAN, SHERRIL D; VAPOR PRESSURE STUDIES OF HYDROPHOBIC INTERACTIONS (CHEMISTRY) (CHE-8103084 A01); 12 MONTHS \$53,067

OREGON

OREGON STATE UNIVERSITY

INGLE, JAMES D; LUMINESCENCE KINETICS-BASED MEASUREMENTS (CHE-7921293 A02); 12 MONTHS \$50,000

EVANS, GLENN T; LIQUID STATE DYNAMICS OF NON-RIGID MOLECULES (CHEMISTRY) (CHE-8000015 A02); 12 MONTHS \$38,763

THOMAS, T DARRAH; ELECTRON SPECTROSCOPY OF SMALL ATOMS AND MOLECULES (CHE-8019760 A01); 12 MONTHS \$64,300

WHITE, JAMES D; TOTAL SYNTHESIS OF SECONDARY METABOLITES (CHEMISTRY) (CHE-8101223 A01); 12 MONTHS \$37,407

HEDBERG, KENNETH; STRUCTURES, DYNAMICS, AND VIBRATIONAL POTENTIAL FUNCTIONS OF MOLECULES (CHEMISTRY) (CHE-8110541 A01); 12 MONTHS \$90,073

NIBLER, JOSEPH W; NONLINEAR OPTICAL SPECTROSCOPY OF TRANSIENT AND REACTIVE MOLECULES (CHEMISTRY) (CHE-8209968); 12 MONTHS \$107,243

UNIVERSITY OF OREGON - EUGENE

BOEKELHEIDE, VIRGIL; MOLECULES WITH NOVEL PI-ELECTRON SYSTEMS (CHEMISTRY) (CHE-7901763 A03); 12 MONTHS \$141,946

MOSELEY, JOHN T; PHOTODISSOCIATION AND PHOTOFRAGMENT SPECTROSCOPY OF MOLECULAR IONS (CHEMISTRY) (CHE-8018074 A03); 12 MONTHS \$69,990

MAZO, ROBERT M; CHEMICAL OSCILLATIONS AND INSTABILITIES (CHE-8005500 A01); 12 MONTHS \$61,200

FINKE, RICHARD G; SYNTHETIC AND MECHANISTIC ORGANOTRANSITION METAL CHEMISTRY: PART I: HETEROBIMETALLIC COMPLEXES; PART II: HETEROPLYUNGSTATE CHEMISTRY (CHE-8018199 A01); 12 MONTHS \$45,200

KOENIG, THOMAS W; PHOTOELECTRON SPECTRA OF ORGANIC INTERMEDIATES (CHE-8103088 A01); 12 MONTHS \$55,000

ENGELKING, PAUL C; LASER SPECTROSCOPY OF MOLECULAR RADICALS (CHE-8109266); 12 MONTHS \$42,000

BALDWIN, JOHN E; THERMAL STEREOISOMERIZATIONS OF CYCLOPROPANES (CHE-8116319); 12 MONTHS \$67,000

HUDSON, BRUCE S; ULTRAVIOLET RESONANCE RAMAN STUDIES OF ELECTRONIC EXCITATIONS (CHE-8119630); 12 MONTHS \$68,600

PENNSYLVANIA

CARNEGIE-MELLON UNIVERSITY

POPLE, JOHN A; DEVELOPMENT AND APPLICATION OF MOLECULAR ORBITAL THEORY (CHE-7901061 A03); 12 MONTHS \$125,450

STEWART, ROBERT F; DERIVED PROPERTIES FROM X-RAY AND HIGH ENERGY SCATTERING (CHE-8016165 A01); 12 MONTHS \$64,400

BOTHNER-BY, AKSEL A; ORIENTATION EFFECTS IN HIGH FIELD NMR (CHEMISTRY) (CHE-8206281); 12 MONTHS \$56,420

DREXEL UNIVERSITY

DAVIS, FRANKLIN A; STUDIES OF ASYMMETRIC OXIDATION (CHEMISTRY) (CHE-8114769); 12 MONTHS \$50,000

SMITH, ALLAN L; LASER SPECTROSCOPY AND PHOTOCHEMICAL KINETICS OF XENON FLUORIDES AND OF DISULFUR (CHEMISTRY) (CHE-8209576); 12 MONTHS \$110,000

PENNSYLVANIA STATE UNIVERSITY

STEELE, WILLIAM A; DYNAMICAL AND EQUILIBRIUM PROPERTIES OF DENSE MULTIPOLAR FLUIDS (CHE-8005364 A03); 12 MONTHS \$68,000

RICHEY, HERMAN G; CHEMISTRY AND REACTIVITY OF ORGANOMAGNESIUM COMPOUNDS (CHE-8016504 A01); 12 MONTHS \$26,500

RICHEY, HERMAN G; CHEMISTRY AND REACTIVITY OF ORGANOMAGNESIUM COMPOUNDS (CHE-8016504 A02); \$26,500

GARRISON, BARBARA J; SURFACE STRUCTURE BY CLASSICAL DYNAMICS: INTERACTION OF KEV IONS WITH SOLIDS (CHEMISTRY) (CHE-8022524 A01); 12 MONTHS \$23,000

BERNHEIM, ROBERT A; MULTIPHOTON MOLECULAR SPECTROSCOPY (CHE-8023224 A01); \$59,570

BERNHEIM, ROBERT A; MULTIPHOTON MOLECULAR SPECTROSCOPY (CHE-8023224 A02); 12 MONTHS \$54,000

WEINREB, STEVEN M; SYNTHESIS OF HETEROCYCLIC NATURAL PRODUCTS (CHE-8100132 A01); 12 MONTHS \$62,300

JACKMAN, LLOYD M; HETEROALLYLLITHIUM AND A-HETEROSUBSTITUTED ALLYL LITHIUM REAGENTS - STRUCTURE AND MECHANISM (CHEMISTRY) (CHE-8103037 A01); 12 MONTHS \$75,000

WINOGRAD, NICHOLAS; PARTICLE/SURFACE INTERACTIONS AND THE CHEMICAL AND STRUCTURAL ANALYSIS OF SURFACES (CHE-8108382 A01); 9 MONTHS \$89,649

SKELL, PHILIP S; THE CHEMISTRY OF GROUND STATES AND EXCITED STATES OF RADICALS (CHE-8111106); 12 MONTHS \$60,500

GEOFFROY, GREGORY L; SYNTHESIS AND REACTIVITY STUDIES OF COORDINATIVELY SATURATED POLYNUCLEAR COMPLEXES: PHOTO-GENERATION OF REACTIVE ORGANOMETALLIC COMPLEXES (CHE-8201160); 12 MONTHS \$67,500

GEOFFROY, GREGORY L; NATIONAL ORGANOMETALLIC CHEMISTRY WORKSHOPS: PENNSYLVANIA STATE UNIVERSITY; UNIVERSITY PARK, PENNSYLVANIA; JUNE 16 18, 1982 AND 1983 (CHE-8201904); 24 MONTHS \$25,000

JURS, PETER C; COMPUTER ASSISTED STUDIES OF STRUCTURE-PROPERTY RELATIONSHIPS (CHE-8202620*); 12 MONTHS \$34,500

HORROCKS, WILLIAM D; OPEN-SHELL IONS AS STRUCTURAL PROBES (CHEMISTRY) (CHE-8205127); 12 MONTHS \$90,000

ST JOSEPH'S UNIVERSITY

DICARLO, ERNEST N; THE APPLICATION OF MICROWAVE DIELECTRIC RELAXATION TO THE STUDY OF STEREOCHEMICALLY NONRIGID CHEMICAL STRUCTURES (CHE-8121068); 24 MONTHS \$38,000

TEMPLE UNIVERSITY

GONCALVES, ANTONIO M; SPIN SELECTION RULES IN CHEMICAL REACTIONS (CHE-8009219 A02); 12 MONTHS \$50,000

UNIVERSITY OF PENNSYLVANIA

CAVA, MICHAEL P; ORGANIC SULFUR, SELENIUM AND TELLURIUM CHEMISTRY (CHE-7925017 A02); 12 MONTHS \$80,151

HOCHSTRASSER, ROBIN M; ULTRAFAST SPECTROSCOPY AND OTHER APPLICATIONS OF LASERS IN CHEMISTRY (CHE-8000016 A02); 12 MONTHS \$70,000

SNEDDON, LARRY G; SYNTHETIC APPLICATIONS OF TRANSITION METAL REAGENTS IN POLYHEDRAL BORON CAGE CHEMISTRY (CHE-8106126 A01); 12 MONTHS \$67,000

NIXON, EUGENE R; SMALL CLUSTERS OF METAL ATOMS AND THEIR BONDING WITH UNSATURATED MOLECULES (CHEMISTRY) (CHE-8111775 A01); 12 MONTHS \$57,000

HOCHSTRASSER, ROBIN M; REGIONAL INSTRUMENTATION FACILITY FOR LASER AND RESEARCH (CHE-8203445*); 12 MONTHS \$269,000

TOFF, MICHAEL R; FLUORESCENCE MEASUREMENTS ON VERY SHORT-LIVED STATES IN AROMATIC MOLECULES (CHEMISTRY) (CHE-8207889); 12 MONTHS \$88,000

WAYLAND, BRADFORD B; ORGANOMETALLIC CHEMISTRY OF D7 METALLO MACROCYCLES (CHE-8210696); 12 MONTHS \$101,118

ROBERTS, BRYAN W; PURCHASE OF A MULTINUCLEAR MAGNETIC RESONANCE SPECTROMETER (CHEMISTRY) (CHE-8210702); 12 MONTHS \$98,000

UNIVERSITY OF PITTSBURGH

SISKA, PETER E; CROSSED MOLECULAR BEAM AND THEORETICAL STUDIES OF METASTABLE RARE GAS INTERACTIONS (CHE-7926400 A02); 12 MONTHS \$46,828

HERCULES, DAVID M; INDUSTRY/UNIVERSITY COOPERATIVE ACTIVITY: INVESTIGATIONS INVOLVING A NOVEL CLASS OF SUPPORTED METAL CATALYSIS (CHEMISTRY) (CHE-8020001 A01*); 12 MONTHS \$45,500

PRATT, DAVID W; ODMR SPECTROSCOPY IN SUPERSONIC JETS. GAS PHASE STRUCTURE AND DYNAMICS OF EXCITED TRIPLET STATES (CHE-8021082 A01); 12 MONTHS \$79,830

SHEPHERD, REX E; PROPERTIES AND REACTION KINETICS OF METAL IMIDAZOLE AND IMIDAZOLATE COMPLEXES (CHE-8021083 A01); 12 MONTHS \$49,100

COETZEE, JOHANNES F; STUDIES OF ION SOLVATION AND OF ITS APPLICATIONS TO ELECTROANALYTICAL CHEMISTRY IN OPTIMIZED SOLVENTS (CHE-8106778 A01); 12 MONTHS \$58,400

HERCULES, DAVID M; ANALYTICAL CHEMISTRY OF SURFACES (CHEMISTRY) (CHE-8108495 A01); 12 MONTHS \$95,000

JORDAN, KENNETH D; THEORETICAL STUDY OF MOLECULAR IONS (CHEMISTRY) (CHE-8109255 A01); 12 MONTHS \$58,000

JEFFREY, GEORGE A; MOLECULAR DISTORTIONS IN CRYSTALS (CHE-8117260); 12 MONTHS \$48,500

WALLACE, W. E. AND CRAIG, R. S; STUDIES OF VERY HYDROGEN-RICH METALLIC SYSTEMS (CHEMISTRY) (CHE-8208048); 12 MONTHS \$72,645

PUERTO RICO

UNIVERSITY OF PUERTO RICO, RIO PIEDRAS

BLUM, LESSER; STATISTICAL MECHANICS OF THE ELECTRIC DOUBLE LAYER (CHEMISTRY) (CHE-8001969 A02*); 12 MONTHS \$44,700

RHODE ISLAND

BROWN UNIVERSITY

SWEIGART, DWIGHT A. AND ITTIL, SREPHEN D; INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: NUCLEOPHILIC ADDITION TO CYCLIC HYDROCARBONS (CHE-8023964 A01*); 12 MONTHS \$32,000

MASON, EDWARD A; MOTIONS AND INTERACTIONS OF IONS IN GASES (CHE-8117056); 12 MONTHS \$52,500

STRATT, RICHARD M; THEORETICAL INVESTIGATION INTO THE EQUILIBRIUM STATISTICAL MECHANICS OF QUANTAL INTRAMOLECULAR DEGREES OF FREEDOM (CHEMISTRY) (CHE-8121474); 12 MONTHS \$53,010

COLE, ROBERT H; DIELECTRIC RELAXATION AND MOLECULAR DYNAMICS BY TIME DOMAIN SPECTROSCOPY (CHEMISTRY) (CHE-8303511); 12 MONTHS \$44,110

GREENE, EDWARD F; A VELOCITY SELECTOR OF HIGH RESOLUTION FOR USE WITH PULSED NOZZLE BEAMS (CHEMISTRY) (CHE-8203795); 12 MONTHS \$24,093

GREENE, EDWARD F; PURCHASE OF AN X-RAY CRYSTALLOGRAPHIC SYSTEM (CHEMISTRY) (CHE-8206423); 12 MONTHS \$91,542

SUGGS, JOHN WILL; DIRECTED CLEAVAGE OF C-C AND RELATED BONDS (CHE-8207269); 12 MONTHS \$57,100

GORDON RESEARCH CONFERENCES

CRUICKSHANK, ALEXANDER M; GORDON RESEARCH CONFERENCE ON VIBRATIONAL SPECTROSCOPY (CHEMISTRY); AUGUST 22-27, 1982, MERIDEN, NEW HAMPSHIRE (29E-8205908); 12 MONTHS \$4,800

SOUTH CAROLINA

FURMAN UNIVERSITY

KNIGHT, LON B; GENERATION AND SPECTROSCOPIC STUDY OF NEW REACTIVE CHEMICAL INTERMEDIATES IN RARE GAS METRICS (CHE-8207327); 12 MONTHS \$44,800

UNIVERSITY OF SOUTH CAROLINA AT COLUMBIA

DURIG, JAMES R; SPECTROSCOPIC STUDIES AND POTENTIAL FUNCTIONS FOR LINEAR AND QUASI-LINEAR MOLECULES CONTAINING SILICON AND GERMANIUM (CHE-7920763 A02); 12 MONTHS \$72,000

ODOM, JEROME D; NUCLEAR MAGNETIC RESONANCE STUDIES OF INORGANIC AND ORGANOMETALLIC COMPOUNDS OF GROUPS IIIA, VA AND VIA (CHEMISTRY) (CHE-8013694 A02); 12 MONTHS \$40,000

BRYSON, THOMAS A; MEDIUM AND MACROCYCLIC RING SYNTHESIS BY ORGANOBORANES (CHE-8014180 A01); 12 MONTHS \$28,700

REGER, DANIEL L; CONVERSION OF ALKYNES INTO SPECIFICALLY SUBSTITUTED ALKENES USING ORGANOMETALLIC IRON INTERMEDIATES (CHE-8019513 A01); 12 MONTHS \$36,000

MARSHALL, JAMES A; NEW SYNTHETIC APPROACHES TO CARBOCYCLIC COMPOUNDS (CHE-8026013 A01); 12 MONTHS \$59,886

GILKERSON, WILLIAM R; SPECTROSCOPIC STUDIES OF ION PAIR FORMATION (CHEMISTRY) (CHE-8100817 A01); 12 MONTHS \$25,320

TENNESSEE

UNIVERSITY OF TENNESSEE AT KNOXVILLE

WEHRY, EARL L; ANALYTICAL APPLICATIONS OF LASER-INDUCED MATRIX ISOLATION SPECTROSCOPY AND ELECTRON-INDUCED MOLECULAR LUMINESCENCE SPECTROMETRY (CHE-8025282 A01); 12 MONTHS \$80,000

VAN HOOK, W. ALEXAND; ISOTOPE EFFECTS IN CONDENSED PHASES (CHE-8112965); 12 MONTHS \$55,000

MAMANTOV, GLEB; PURCHASE OF A NUCLEAR MAGNETIC RESONANCE SPECTROMETER (CHE-8206190); 12 MONTHS \$120,000

BLOOR, JOHN E; THEORETICAL CALCULATIONS OF LOW ENERGY ELECTRON SCATTERING CROSS SECTIONS OF POLYATOMIC MOLECULES (CHEMISTRY) (CHE-8207040); 12 MONTHS \$50,000

VANDERBILT UNIVERSITY

BANNA, M. SALIM; X-RAY PHOTOELECTRON AND AUGER ELECTRON SPECTROSCOPY OF ATOMS (CHE-7918390 A02); 12 MONTHS \$29,000

LUKEHART, CHARLES M; METALLA-DERIVATIVES OF SELECTED BIOLOGICALLY IMPORTANT MOLECULES (CHE-8106140 A01); 12 MONTHS \$45,323

TEXAS

NORTH TEXAS STATE UNIVERSITY

JONES, PAUL R; STEREOCHEMISTRY AND MECHANISMS OF SILENE AND SILENOLIDE REACTIONS (CHE-8100668); 12 MONTHS \$36,000

DUOGAN, JEROME L; SEVENTH CONFERENCE ON THE APPLICATION OF ACCELERATORS IN RESEARCH AND INDUSTRY; DENTON, TEXAS; NOVEMBER 1-3, 1981 (39Y-8190733*); 12 MONTHS \$2,000

RICE UNIVERSITY

PARRY, RONALD J; BIOSYNTHESIS AND METABOLISM OF SULFUR COMPOUNDS (CHEMISTRY) (CHE-8004118 A02); 12 MONTHS \$38,600

SMALLEY, RICHARD E; PHOTOCHEMICAL STUDIES WITH SUPERSONIC MOLECULAR BEAMS (CHE-8004807 A02); 12 MONTHS \$71,732

BROOKS, PHILIP R. AND CURL, ROBERT F; SPECTROSCOPY AND DYNAMICS OF REACTION COMPLEXES (CHE-8007651 A02); 12 MONTHS \$90,000

BERRY, MICHAEL J; NATURE AND DYNAMICS OF HIGHLY VIBRATIONALLY EXCITED POLYATOMIC MOLECULES (CHE-8008330 A02); 12 MONTHS \$80,000

ENGEL, PAUL S; ORGANIC FREE RADICAL AND EXCITED STATE CHEMISTRY (CHE-8013160 A02); 12 MONTHS \$72,200

MARGRAVE, JOHN L; SPECTROSCOPIC STUDIES OF THE INTERACTIONS OF METAL ATOMS AND SMALL METAL CLUSTERS WITH WATER, NH₃, HF, CH₄ AND OTHER LEWIS BASES (CHEMISTRY) (CHE-8110512 A01); 12 MONTHS \$40,000

CURL, ROBERT F. AND TITTEL, FRANK K; HIGH RESOLUTION LASER SPECTROSCOPY (CHEMISTRY) (CHE-8200096); 12 MONTHS \$70,000

BROOKS, PHILIP R; REACTIONS OF ORIENTED MOLECULES (CHEMISTRY) (CHE-8210438); 12 MONTHS \$75,292

TEXAS A & M UNIVERSITY

COTTON, FRANK; RESEARCH IN INORGANIC AND ORGANOMETALLIC CHEMISTRY (CHE-8100448 A05); 12 MONTHS \$150,062

HALL, MICHAEL E; THEORETICAL STUDIES ON THE ELECTRONIC AND MOLECULAR STRUCTURE OF INORGANIC AND ORGANOMETALLIC SYSTEMS (CHE-7920993 A02); 12 MONTHS \$30,000

BEVAN, JOHN W; DYNAMIC PROPERTIES OF HYDROGEN-BONDED SYSTEMS (CHE-7932237 A03); 12 MONTHS \$48,000

SCHWEIKERT, EMILE A; ANALYTICAL STUDIES WITH HIGH ENERGY ION BEAMS (CHE-7927757 A03); \$3,660

SCHWEIKERT, EMILE A; ANALYTICAL STUDIES WITH HIGH ENERGY ION BEAMS (CHEMISTRY) (CHE-7927757 A04); 12 MONTHS \$59,000

GINGERICH, KARL A; MASS SPECTROMETRIC AND MATRIX ISOLATION SPECTROSCOPIC INVESTIGATION OF HIGH TEMPERATURE SYSTEMS (CHEMISTRY) (CHE-8007549 A02); 12 MONTHS \$75,000

YEAGER, DANNY L; METHODS FOR CALCULATING THE ELECTRONIC STATES OF ATOMS AND MOLECULES (CHEMISTRY) (CHE-8023552 A01); 12 MONTHS \$35,000

CLEARFIELD, ABRAHAM; CATALYSIS BY CATIONS, COMPLEXES, AND METALS SUPPORTED ON THE SURFACE OR BETWEEN THE LAYERS OF SYNTHETIC INORGANIC ION EXCHANGERS (CHE-8114613 A1); 12 MONTHS \$46,400

LAANE, JAAN; RAMAN DIFFERENCE SPECTROSCOPY, VIBRATION POTENTIAL ENERGY SURFACES, AND NITROGEN OXIDES (CHE-8121124); 12 MONTHS \$80,000

DARENSBOURG, MARCETTA Y; A STUDY OF PROTECTION AND/OR ACTIVATION OF TRANSITION METAL HYDRIDES BY INTERACTING LEWIS ACIDS OR CATIONS (CHE-8200583); 9 MONTHS \$42,020

MACFARLANE, RONALD D; PLASMA DESORPTION MASS SPECTROMETRY OF NON-VOLATILE MOLECULES (CHEMISTRY) (CHE-8206030); 10 MONTHS \$93,412

NATOWITZ, JOSEPH B; PURCHASE OF AN ULTRAVIOLET-VISIBLE SPECTROPHOTOMETER FOR RESEARCH INTO CATALYSIS (CHEMISTRY) (CHE-8209347); 12 MONTHS \$21,500

DARENSBOURG, DONALD J; THE LABILITY OF METAL-CARBON AND CARBON-OXYGEN BONDS IN ORGANOMETALLIC COMPOUNDS (CHEMISTRY) (CHE-8209799); 12 MONTHS \$60,400

TEXAS CHRISTIAN UNIVERSITY

BARTLETT, PAUL D; MECHANICS OF ORGANIC REACTIONS (CHEMISTRY) (CHE-8104978 A01); 5 MONTHS \$12,000

ALBRIGHT, JOHN G; MEASUREMENT OF DIFFUSION COEFFICIENTS OF KHC₈O₄ AND NAHC₈O₄ IN WATER AT 25 DEGREES AND 37 DEGREES (CHEMISTRY) (CHE-8112575 A01); 12 MONTHS \$14,878

TEXAS TECH UNIVERSITY

KICE, JOHN L; MECHANISMS OF REACTIONS OF ORGANOCERLENIUM COMPOUNDS (CHE-7918877 A02); 12 MONTHS \$31,500

QUADE, C R; VIBRATION-ROTATION AND LARGE AMPLITUDE INTERNAL MOTION INTERACTIONS WITH CURVILINEAR INTERNAL COORDINATES (CHEMISTRY) (CHE-8020413 A01); 12 MONTHS \$30,000

SHINE, HENRY J; ROLE OF CATION RADICALS IN ORGANIC REACTIONS (CHE-8026576 A01); 12 MONTHS \$75,200

UNIV OF TEXAS AT ARLINGTON

COLEMAN, PAUL G, SHARMA, SURESH C, AND DIANA, LEONARD M; THE SIXTH INTERNATIONAL CONFERENCE ON POSITRON ANNIHILATION; ARLINGTON, TEXAS, APRIL 3-7, 1982 (DMR-8115227*); 12 MONTHS \$3,000

UNIV OF TEXAS AT AUSTIN

DEWAR, MICHAEL J; EXTENSION OF MND TO TRANSITION METALS (CHE-7803213 A04); 12 MONTHS \$47,000

BARD, ALLEN J; MECHANISMS OF ELECTRODE REACTIONS (CHE-7903729 A03); 12 MONTHS \$100,000

FOX, MARY E; MECHANISMS OF PHOTOREACTIONS OF CARBANIONS (CHE-7915762 A02); 12 MONTHS \$39,600

MCCORMICK, WILLIAM D, TURNER, JACK S, AND SWINNEY, HARRY L; AN EXPERIMENTAL AND THEORETICAL INVESTIGATION OF THE BELOUSOV-ZHABOTINSKII REACTION (CHE-7923627 A02); 12 MONTHS \$40,669

BARD, ALLEN J; PHOTOELECTROCHEMISTRY AND HETEROGENEOUS PHOTOPROCESSES AT SEMICONDUCTORS (CHE-8000682 A02); 12 MONTHS \$61,600

WHITE, JOHN M; CHEMISORPTION AND CATALYSIS ON WELL CHARACTERIZED METAL SURFACES (CHEMISTRY) (CHE-8005197 A03); 12 MONTHS \$94,000

KYBA, EVAN P; TWO ASPECTS OF ORGANOMETALLIC CHEMISTRY: HOMOGENEOUS CATALYSIS AND NOVEL ORGANOMETALLIC STRUCTURES (CHE-8006107 A02); 7 MONTHS \$38,516

FINK, MANFRED; EXPERIMENTAL DETERMINATION OF MOLECULAR CHARGE DENSITIES BY ELECTRON DIFFRACTION (CHEMISTRY) (CHE-8007940 A03); 12 MONTHS \$53,000

LAGOWSKI, JOSEPH J; THE CHEMISTRY OF MONATOMIC TRANSITION METAL ANIONS IN SOLUTION (CHE-8009214 A02); 12 MONTHS \$61,500

HOLCOMBE, JAMES A; FUNDAMENTAL STUDIES OF INTERFERENCE EFFECTS IN ELECTROTHERMALLY HEATED GRAPHITE (CHEMISTRY) (CHE-8107633 A01); 12 MONTHS \$44,044

WOODRUFF, WILLIAM H; DYNAMICAL EVOLUTION OF MOLECULAR STRUCTURES IN SOLUTION. REACTION TRANSIENTS AND ELECTRONICALLY EXCITED STATES BY TIME-RESOLVED LASER SPECTROSCOPY (CHE-8109541 A01); 12 MONTHS \$61,500

WYATT, ROBERT E; THEORETICAL STUDIES IN CHEMICAL DYNAMICS (CHE-8109576 A01); 12 MONTHS \$65,000

BAULD, NATHAN L; CATION RADICALS IN SOLUTION (CHEMISTRY) (CHE-8121700); 12 MONTHS \$42,333

WHITE, JOHN M; PURCHASE OF X-RAY PHOTOELECTRON SPECTROSCOPY SYSTEM (CHE-8201172); 12 MONTHS \$103,000

COWLEY, ALAN H; THE SYNTHESIS, CHARACTERIZATION, AND REACTIONS OF MAIN GROUP CATIONS, RADICALS, AND MOLECULES WITH UNUSUAL COORDINATION NUMBERS (CHE-8205871); 12 MONTHS \$159,100

LAGOW, RICHARD J; POLYLITHIUM ORGANIC COMPOUNDS: A RESEARCH AREA OF EMERGING SIGNIFICANCE (CHE-8210708); 12 MONTHS \$79,995

UNIV OF TEXAS AT DALLAS

CALDWELL, RICHARD A; STUDIES OF TRANSIENT TRIPLET BIRADICALS AND BIRADICALOID GEOMETRIES (CHE-7915228 A02); 12 MONTHS \$40,000

UNIVERSITY OF HOUSTON CENTRAL CAMPUS

RABALAIS, J WAYNE; DEVELOPMENT OF SECONDARY ION MASS SPECTROMETRY (SIMS) FOR ANALYSIS OF CHEMICAL STRUCTURES AND BONDING (CHE-7915177 A02); 12 MONTHS \$50,000

KOURL, DONALD J; FORMAL AND COMPUTATIONAL STUDIES IN THE QUANTUM THEORY OF MOLECULAR DYNAMICS (CHE-7919098 A02); 12 MONTHS \$51,709

KADISH, KARL M; REDOX REACTIVITY OF METALLOPORPHIRINS (CHE-7921536 A02); 12 MONTHS \$60,430

KEVAN, LARRY; STUDIES OF MOLECULAR AND RADICAL ORIENTATION ON SURFACES BY ELECTRON MAGNETIC RESONANCE (CHE-8016914 A02); 12 MONTHS \$48,600

UTAH

BRIGHAM YOUNG UNIVERSITY

ROBINS, ROLAND K; PREPARATION AND BIOCHEMISTRY OF DINUCLEOSIDE 5',5''-TETRAPHOSPHATES AND RELATED NUCLEOTIDES (CHEMISTRY) (CHE-8116883); 12 MONTHS \$26,650

UNIVERSITY OF UTAH

GIDDINGS, J CALVIN; SEPARATION OF COMPLEX MATERIALS BY FIELD FLOW FRACTIONATION (FFF) (CHE-7919879 A02); 12 MONTHS \$120,000

PARRY, ROBERT W; DICOORDINATE CATIONS OF PHOSPHORUS-SYNTHESIS CHARACTERIZATION, CHEMISTRY (CHE-7920313 A02); 12 MONTHS \$36,550

KECK, GARY E; STUDIES ON THE APPLICATION OF ACYL-NITROSO COMPOUNDS TO C-N BOND FORMATION IN ORGANIC SYNTHESIS (CHE-7922026 A02); 12 MONTHS \$28,107

BENTRUDE, WESLEY G; FREE-RADICAL AND PHOTOCHEMICAL REACTIONS OF ORGANOPHOSPHORUS SYSTEMS (CHEMISTRY) (CHE-7925056 A02); 12 MONTHS \$45,000

WALLING, CHEVES T; ORGANIC REACTION MECHANISMS INVOLVING FREE RADICAL INTERMEDIATES (CHE-7926321 A02); 12 MONTHS \$75,000

GRANT, DAVID M, AND MICHL, JOSEF; NMR OF ORGANIC SOLIDS AT CRYOGENIC TEMPERATURES (CHEMISTRY) (CHE-8000256 A02); 12 MONTHS \$50,408

BRECKENRIDGE, WILLIAM H; STATE-TO-STATE CHEMISTRY AND ENERGY-TRANSFER USING THE LASER PUMP-AND-PROBE TECHNIQUE (CHE-8007033 A02); 12 MONTHS \$80,000

FUTRELL, JEAN H; MOLECULAR DYNAMICS STUDY OF LOW ENERGY ELECTRON TRANSFER REACTIONS (CHE-8017794 A01); 12 MONTHS \$34,962

GUILLORY, WILLIAM A; LASER INDUCED PHYSICAL AND CHEMICAL PROCESSES (CHE-8023362 A01); 12 MONTHS \$69,400

STANG, PETER J; PREPARATIVE USES OF UNSATURATED REACTIVE INTERMEDIATES (CHEMISTRY) (CHE-8107629 A01); 15 MONTHS \$106,677

ERNST, RICHARD D; TRANSITION METAL COMPOUNDS OF PENTADIENYL LIGANDS (CHE-8120683); 12 MONTHS \$45,700

MICHL, JOSEF; NEW BIRADICAL-LIKE REACTIVE INTERMEDIATES AND SIMS OF SMALLMOLECULE SOLIDS (CHE-8121122); 12 MONTHS \$275,000

GUILLORY, WILLIAM A; SINGLE LASER PHOTON-INDUCED CHEMICAL DISSOCIATION IN NONAQUEOUS SOLVENTS (CHEMISTRY) (CHE-8202740); 8 MONTHS \$52,000

GLADYSZ, JOHN A; NEW SYNTHETIC AND MECHANISTIC CHEMISTRY OF TRANSITION METAL TRIALKYLSILANES (CHE-8205730); 12 MONTHS \$49,491

SIMONS, JOHN T; THEORETICAL STUDIES IN STRUCTURE AND DYNAMICS (CHEMISTRY) (CHE-8206845); 12 MONTHS \$61,538

HARRIS, JOEL M; LASER-INDUCED CALORIMETRY FOR TRACE ANALYSIS IN CONDENSED MEDIA (CHEMISTRY) (CHE-8306898); 12 MONTHS \$82,424

UTAH STATE UNIVERSITY

MOORE, WILLIAM M; PARTIAL-WAVE METHODS IN MOLECULAR ELECTRONIC STRUCTURE CALCULATIONS (CHEMISTRY) (CHE-8113485 A01); \$11,899

HANSEN, WILFORD N; INTERNATIONAL CONFERENCE ON THE ELECTRONIC AND MOLECULAR STRUCTURE OF ELECTRODE-ELECTROLYTE

INTERFACES, UTAH STATE UNIVERSITY, JULY 25-30, 1982 (CHE-8121462); 6 MONTHS \$7,000

VERMONT

UNIVERSITY OF VERMONT

GEIGER, WILLIAM E. ELECTROCHEMICAL STUDIES OF STRUCTURAL CONSEQUENCES OF ORGANOMETALLIC ELECTRON-TRANSFER REACTIONS (CHE-800242 A02); 12 MONTHS \$81,621
 FIANAGAN, TED B. THERMODYNAMICS OF HYDROGEN ABSORPTION BY INTERMETALLIC COMPOUNDS (CHE-8024646 A01); 12 MONTHS \$47,485
 BUSHWELLER, C. HACKETT, AND WELTIN, EUGEN E. STEREODYNAMICS OF MOLECULAR SYSTEMS (CHEMISTRY) (CHE-8024931 A01); 12 MONTHS \$47,000

VIRGINIA

COLLEGE OF WILLIAM AND MARY

DFLOS, JOHN B. ELEMENTARY PROCESSES OF CHEMISTRY (CHE-8114759 A01); 12 MONTHS \$43,256
 DJORDJEVIC, CIRILA. TRANSITION METAL PEROXO COMPLEXES (CHE-8207175); 12 MONTHS \$30,627

UNIVERSITY OF VIRGINIA

ANDREWS, W. L. MATRIX SPECTROSCOPIC STUDIES OF MOLECULAR IONS AND CHEMICAL INTERMEDIATES (CHE-7910966 A03); 12 MONTHS \$57,000
 RICHARDSON, FREDERICK S. SPECTROSCOPIC PROBES OF MOLECULAR STEREOCHEMISTRY AND ELECTRONIC STRUCTURE (CHE-8004209 A02); 12 MONTHS \$65,000
 SCHATZ, PAUL N. MOLECULAR AND MAGNETOOPTICAL SPECTROSCOPY (CHE-8025608 A01); 12 MONTHS \$103,500
 GRIMES, RUSSELL N. STRUCTURE AND MECHANISM IN HETEROBORANE CLUSTER CHEMISTRY (CHE-8119936); 12 MONTHS \$66,077
 DEMAS, JAMES N. NEW METHODS OF HARVESTING SOLAR ENERGY AND OF MEASURING LIGHT INTENSITIES (CHEMISTRY) (CHE-8206279); 12 MONTHS \$69,000

VIRGINIA POLYTECHNIC INSTITUTE

WOLFE, JAMES F. HETEROAROMATIC SRN1 REACTIONS (CHE-8022538 A01); 12 MONTHS \$71,915
 HUDLICKY, TOMAS. GENERAL METHODOLOGY FOR THE SYNTHESIS OF PERHYDROAZULENE TERPENOIDS (CHEMISTRY) (CHE-8212127); 12 MONTHS \$34,100

WASHINGTON

BOEING ENGINEERING AND CONSTRUCTION

LYTLE, FARREL W. AND SANDSTROM, DONALD R. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: EXAFS INVESTIGATION OF SUPPORT EFFECTS, CHEMISORPTION AND SURFACE DISORDER IN CATALYSIS (C 16-7918084 A02*); 12 MONTHS \$45,610

UNIVERSITY OF WASHINGTON

DAVIDSON, ERNEST R. QUANTUM THEORY OF MOLECULES (CHE-7923775 A02); 12 MONTHS \$74,845
 RABINOVITCH, B. S. KINETIC STUDIES OF FUNDAMENTAL PROCESSES IN UNIMOLECULAR REACTIONS (CHE-7926288 A02); 12 MONTHS \$72,000
 KOWALSKI, BRUCE R. OPTIMAL METHODS OF MULTICOMPONENT CHEMICAL ANALYSIS (CHEMISTRY) (CHE-8004220 A01); 12 MONTHS \$42,000
 NORMAN, JOE G. ELECTRONIC STRUCTURE OF TRANSITION METAL COMPOUNDS (CHE-8011976 A01); 12 MONTHS \$14,016
 ENGEL, THOMAS. ATOMIC AND MOLECULAR BEAM SCATTERING FROM SURFACES (CHEMISTRY) (CHE-8109067 A01); 12 MONTHS \$86,000
 BORDEN, WESTON T. SYNTHESIS AND STUDY OF SOME THEORETICALLY INTERESTING MOLECULES (CHE-8120892); 12 MONTHS \$78,872
 KWIRAM, ALVIN L. PURCHASE OF A GAS CHROMATOGRAPH AND FOURIER TRANSFORM INFRARED SPECTROPHOTOMETER (CHEMISTRY) (CHE-8211515); 12 MONTHS \$76,000

WASHINGTON STATE UNIVERSITY

HILL, HERBERT II. PARTICIPATION OF SMALL COLLEGE FACULTY IN NSF-SUPPORTED RESEARCH AT LARGE INSTITUTIONS (CHE-7725743 A04); \$8,426
 HUNT, JOHN P. ROUNDHILL, D. M. AND DODGEN, HAROLD W. HIGH PRESSURE NMR STUDIES ON PORPHYRIN AND ORGANOMETALLIC COMPOUNDS (CHE-7915792 A02); 12 MONTHS \$30,100
 HUNT, JOHN P. ROUNDHILL, D. M. AND DODGEN, HAROLD W. HIGH PRESSURE NMR STUDIES ON PORPHYRIN AND ORGANOMETALLIC COMPOUNDS (CHE-7915792 A02); \$30,100
 COOKE JR., MANNING P. NEW APPROACHES TO CONJUGATE ADDITION REACTIONS (CHE-7909989 A02); 12 MONTHS \$34,526
 MATTESON, DONALD S. DIRECTED CHIRAL SYNTHESIS WITH BORONIC ESTERS (CHE-8025229 A01); 12 MONTHS \$49,600
 WHERLAND, SCOT E. ELECTRON TRANSFER KINETICS OF CHEMICALLY CAGED METAL IONS IN NON-AQUEOUS SOLUTIONS (CHE-8204102); 12 MONTHS \$40,400
 LEGG, J. I. PURCHASE OF GAS CHROMATOGRAPH-MASS SPECTROMETER (CHEMISTRY) (CHE-8209719); 12 MONTHS \$120,500

WISCONSIN

MARQUETTE UNIVERSITY

REGEN, STEVEN L. SUPPORTED REAGENTS AND CHEMICAL DEVICES (CHEMISTRY) (CHE-8103083 A01); 12 MONTHS \$42,292
 NAKAMOTO, KAZUO. SPECTROSCOPIC STUDIES OF MOLECULAR OXYGEN ADDUCTS OF METAL CHELATES (CHEMISTRY) (CHE-8205522); 12 MONTHS \$46,800

UNIVERSITY OF WISCONSIN-MADISON

WEINHOLD, FRANK A. QUANTUM MECHANICS OF ATOMS AND MOLECULES (CHEMISTRY) (CHE-8023004 A01); 12 MONTHS \$46,006
 NELSEN, STEPHEN F. RADICAL IONS AND RADICALS WITH SMALL PI SYSTEMS (CHE-8026111 A01); 12 MONTHS \$80,000
 WEST, ROBERT. POLYQUINOCYCLOALKANES AND OXOCARBONS (CHE-8026714 A01); 12 MONTHS \$64,713
 ZIMMERMAN, HOWARD E. MECHANISTIC AND EXPLORATORY ORGANIC PHOTOCHEMISTRY (CHE-8100716 A01); 12 MONTHS \$143,000
 TROST, BARRY M. NEW APPROACHES FOR SELECTIVITY IN THE SYNTHESIS OF ORGANIC COMPOUNDS (CHE-8107215 A02); 12 MONTHS \$137,693
 CERTAIN, PHILLIP R. ATOMIC AND MOLECULAR RESONANCE STATES (CHEMISTRY) (CHE-8107628 A01); 12 MONTHS \$52,000
 GOERING, HARLAN L. ALKYLATION REACTIONS WITH ORGANOMETALLIC COMPOUNDS (CHE-8108535 A01); 12 MONTHS \$76,000
 GAINES, DONALD F. METAL- AND NONMETAL-BORON CLUSTERS: SYNTHETIC AND MECHANISTIC STUDIES (CHE-8109162 A01); 12 MONTHS \$63,800
 REICH, HANS J. SYNTHETIC APPLICATIONS OF ORGANOMETALLOIDS (CHE-8111038 A01); 12 MONTHS \$68,701
 EVANS, DENNIS H. MECHANISTIC AND ANALYTICAL STUDIES IN ORGANIC ELECTROCHEMISTRY (CHE-8111421 A01); 12 MONTHS \$91,966
 VEDEJS, EDWIN. MACROLIDE AGLYCONES; MACROCYCLE CHEMISTRY (CHE-8113026 A01); 12 MONTHS \$77,000
 WHITLOCK, HOWARD W. WATER SOLUBLE MOLECULES CONTAINING HYDROPHOBIC CAVITIES (CHEMISTRY) (CHE-8115437 A01); 12 MONTHS \$54,700
 SHERIDAN, ROBERT S. SYNTHESIS AND INVESTIGATION OF HIGH ENERGY PRECURSORS TO AROMATIC COMPOUNDS (CHE-8117318); 12 MONTHS \$51,000
 WALTERS, JOHN P. INVESTIGATION, USE, AND CONTROL OF PHYSICAL AND CHEMICAL PHENOMENA IN SPECTROSCOPICALLY-USEFUL ELECTRICAL DISCHARGES (CHE-8117701); 12 MONTHS \$91,971
 WRIGHT, JOHN C. NEW ANALYTICAL APPLICATIONS OF SITE SELECTIVE SPECTROSCOPY (CHE-8119893); 12 MONTHS \$68,700
 WIRTH, MARY J. INVESTIGATIONS OF TWO-PHOTON SPECTROSCOPY AND ASSOCIATED RELAXATION PHENOMENA FOR ANALYTICAL CHEMISTRY (CHE-8120187); 12 MONTHS \$56,697
 CASEY, CHARLES P. ORGANOMETALLIC REACTION MECHANISMS (CHE-8120507); 12 MONTHS \$82,712
 TAYLOR, JAMES W. CHEMICAL APPLICATIONS OF ELECTRON AND ION SPECTROSCOPY (CHE-8121205); 12 MONTHS \$75,000
 HARRIMAN, JOHN E. REDUCED DENSITY MATRIX AND DENSITY FUNCTIONAL THEORY (CHEMISTRY) (CHE-8201909); 12 MONTHS \$45,000
 DAHL, LAWRENCE F. STRUCTURAL SYSTEMATICS AND BONDING IN ORGANOMETALLIC COMPLEXES: NEW UNUSUAL METAL CLUSTERS AND CLUSTER CHEMISTRY (CHE-8205331); 12 MONTHS \$139,993
 TROST, BARRY M. PURCHASE OF MASS SPECTROMETER (CHEMISTRY) (CHE-8205889); 12 MONTHS \$205,000
 WOODS, R. CLAUDE. MICROWAVE SPECTROSCOPY OF IONS AND OTHER TRANSIENT SPECIES (CHEMISTRY) (CHE-8206194); 14 MONTHS \$207,000
 HIRSCHFELDER, JOSEPH O. INTERACTION OF ELECTROMAGNETIC FIELDS WITH ATOMS AND MOLECULES (CHEMISTRY) (CHE-8207235); 12 MONTHS \$60,000
 FENSKE, RICHARD F. MOLECULAR ORBITAL CALCULATIONS FOR TRANSITION METAL COMPLEXES (CHEMISTRY) (CHE-8307434); 12 MONTHS \$48,775
 TREICHEL, PAUL M. REACTIVITY OF METAL COMPLEXES WITH POLYCYCLIC HYDROCARBON LIGANDS (CHEMISTRY) (CHE-8210497); 12 MONTHS \$48,000

UNIVERSITY OF WISCONSIN-MILWAUKEE

HALL, W. KEITH. RELATIONSHIPS BETWEEN SURFACE CHEMISTRY AND CATALYSIS: MOLYBDENA-ALUMINA AND RELATED SYSTEMS (CHE-8019309 A01); 12 MONTHS \$104,920
 COOK, JAMES M. AND WEISS, ULRICH. GENERAL APPROACH FOR THE SYNTHESIS OF POLYQUINANES (CHEMISTRY) (CHE-8206356); 12 MONTHS \$61,167

MATHEMATICAL SCIENCES

ALABAMA

UNIVERSITY OF ALABAMA

HOPENWASSER, ALAN. NON-SELF-ADJOINT OPERATOR ALGEBRAS (MATHEMATICAL SCIENCES) (MCS-8002919 A01); 24 MONTHS \$26,400

UNIVERSITY OF ALABAMA IN BIRMINGHAM

LEWIS, ROGER T. QUALITATIVE SPECTRAL ANALYSIS OF SINGULAR ORDINARY AND PARTIAL DIFFERENTIAL OPERATORS (MATHEMATICAL SCIENCES) (MCS-8005811 A01); 24 MONTHS \$27,133

ARIZONA

ARIZONA STATE UNIVERSITY

GOLUBITSKY, MARTIN. APPLICATIONS OF SINGULARITY THEORY (MCS-8101580 A01); 12 MONTHS \$17,262
 KEYFITZ, BARBARA L. COMBUSTION PROBLEMS AND REACTION-DIFFUSION EQUATIONS (MCS-8103441 A01); 12 MONTHS \$13,900
 HERRERO, DOMINGO A. APPROXIMATION OF HILBERT SPACE OPERATORS (MATHEMATICAL SCIENCES) (MCS-8122093); 24 MONTHS \$25,800

INDIVIDUAL AWARD

SCHILLING, RANDOLPH J.; MATHEMATICAL SCIENCES POSTDOCTORAL RESEARCH FELLOWSHIP (MCS-8211308); 24 MONTHS \$29,000

NORTHERN ARIZONA UNIVERSITY

PERKO, LAWRENCE M.; EXISTENCE, UNIQUENESS, NONEXISTENCE, AND GLOBAL BEHAVIOR OF LIMIT CYCLES OF POLYNOMIALS SYSTEMS IN THE PLANE (MATHEMATICAL SCIENCES) (MCS-8201020); 24 MONTHS \$33,081

UNIVERSITY OF ARIZONA

GROEMER, HELMUT; COVERING PROBLEMS FOR CONVEX SETS (MATHEMATICAL SCIENCES) (MCS-8001578 A02); 12 MONTHS \$19,700

NEWMAN, CHARLES M.; TOPICS IN STATISTICAL MECHANICS (MCS-8019384 A01); 12 MONTHS \$17,569

NEWMAN, CHARLES M.; TOPICS IN STATISTICAL MECHANICS (MATHEMATICAL SCIENCES) (MCS-8019384 A02); \$8,000

FLASCHKA, HERMANN, AND MC LAUGHLIN, DAVID W.; THEORY AND APPLICATION OF INVERSE SPECTRAL TRANSFORM (MCS-8102748 A01); 12 MONTHS \$25,134

SHAKED, MOSHE; STOCHASTIC PROCESSES AND ORDERINGS USEFUL IN RELIABILITY THEORY (MATHEMATICAL SCIENCES) (MCS-8200098); 24 MONTHS \$23,622

JONES, CHRISTOPH; ANALYSIS OF SOME MODELS IN MATHEMATICAL BIOLOGY AND MECHANICS (MCS-8200392); 12 MONTHS \$9,340

BHATTACHARYA, RABINDRA N.; CENTRAL LIMIT THEOREMS UNDER DEPENDENCE AND EDGEWORTH EXPANSIONS (MATHEMATICAL SCIENCES) (MCS-8201628); 12 MONTHS \$14,100

PALMER, JOHN N.; LATTICE MODEL CALCULATION OF SCALING FUNCTIONS (MCS-8201890); 12 MONTHS \$11,340

FIFE, PAUL C.; THE MATHEMATICS OF REACTING AND DIFFUSING SYSTEMS (MATHEMATICAL SCIENCES) (MCS-8202056); 24 MONTHS \$45,450

ARKANSAS

UNIVERSITY OF ARKANSAS FAYETTEVILLE

LUECKING, DANIEL H.; CLOSED RANGE EMBEDDINGS OF BERGMAN SPACES (MATHEMATICAL SCIENCES) (MCS-8201603); 24 MONTHS \$20,739

CALIFORNIA

CALIFORNIA INSTITUTE OF TECHNOLOGY

ASCHBACHER, MICHAEL; GROUP THEORY (MCS-8001603 A02); 12 MONTHS \$23,456

KECHRIS, ALEXANDER S.; CONSISTENCY OF STRONG SET-THEORETICAL AXIOMS AND THE HYPOTHESIS OF DETERMINACY (MATHEMATICAL SCIENCES) (MCS-8117804); 12 MONTHS \$34,400

SIMON, BARRY M.; MATHEMATICAL ATOMIC PHYSICS (MCS-8120833*); 12 MONTHS \$49,050

LUXEMBURG, W A J.; FUNCTIONAL ANALYSIS AND NONSTANDARD ANALYSIS (MCS-8121162); 12 MONTHS \$26,900

COHEN, DONALD S.; DIFFERENTIAL EQUATIONS AND CONTINUUM MECHANICS (MCS-8205407*); 12 MONTHS \$21,000

CALIFORNIA STATE UNIVERSITY, SACRAMENTO

HAGOPIAN, CHARLES L.; FIXED-POINT PROBLEMS FOR PLANE CONTINUA (MCS-8205282); 12 MONTHS \$15,000

CLAREMONT GRADUATE SCHOOL

JAMES, ROBERT C.; GEOMETRY OF NORMED LINEAR SPACES (MCS-8103390 A01); 12 MONTHS \$16,990

HARVEY MUDD COLLEGE

BUSENBURG, STAVROS N.; FUNCTIONAL DIFFERENTIAL EQUATIONS WITH APPLICATIONS IN BIOLOGY (MATHEMATICAL SCIENCES) (MCS-8200503); 12 MONTHS \$14,800

INDIVIDUAL AWARD

SMILLIE, JOHN D.; MATHEMATICAL SCIENCES POSTDOCTORAL RESEARCH FELLOWSHIP (MCS-8114164 A01); 12 MONTHS \$22,000

TREFETHEN, LLOYD N.; MATHEMATICAL SCIENCES POSTDOCTORAL RESEARCH FELLOWSHIP (MCS-8211305); 24 MONTHS \$29,000

SELLKE, THOMAS M.; MATHEMATICAL SCIENCES POSTDOCTORAL RESEARCH FELLOWSHIP (MCS-8211306); 24 MONTHS \$29,000

MCDONALD, JOHN A.; MATHEMATICAL SCIENCES POSTDOCTORAL RESEARCH FELLOWSHIP (MCS-8211311); 24 MONTHS \$29,000

LEVEQUE, RANDALL J.; MATHEMATICAL SCIENCES POSTDOCTORAL RESEARCH FELLOWSHIP (MCS-8211312); 24 MONTHS \$29,000

FRIEDBERG, SOLOMON; MATHEMATICAL SCIENCES POSTDOCTORAL RESEARCH FELLOWSHIP (MCS-8211321); 24 MONTHS \$29,000

FOREMAN, MATTHEW D.; MATHEMATICAL SCIENCES POSTDOCTORAL RESEARCH FELLOWSHIP (MCS-8211322); 24 MONTHS \$29,000

MATHEMATICAL SCIENCES RESEARCH INSTITUTE INC

CHERN, SHIING-SH, MOORE, CALVIN C, AND SINGER, ISADORE M.; A MATHEMATICAL SCIENCES RESEARCH INSTITUTE: PHASE II (MCS-8120790 A01); \$1,480,000

CHERN, SHIING-SH, MOORE, CALVIN C, AND SINGER, ISADORE M.; A MATHEMATICAL SCIENCES RESEARCH INSTITUTE: PHASE II (MCS-8120790 A02*); \$175,656

POMONA COLLEGE

COOKE, KENNETH L.; DIFFERENTIAL EQUATIONS AND EPIDEMIOLOGY (MCS-8104837 A01); 12 MONTHS \$19,705

STANFORD UNIVERSITY

MANNE, ALAN S, AND EAVES, B CURTIS; COMPUTATION OF EQUILIBRIA FOR PIECEWISE LINEAR SYSTEMS (SES-7816311 A03*); 12 MONTHS \$20,000

SIU, YUM-TONG; SEVERAL COMPLEX VARIABLES AND ANALYTIC SPACES (MCS-7904476 A03); 12 MONTHS \$28,946

SIU, YUM-TONG; SEVERAL COMPLEX VARIABLES AND ANALYTIC SPACES (MCS-7904476 A04); \$2,100

KARLIN, SAMUEL; TOPICS IN ANALYSIS, TOTAL POSITIVITY AND RELATED MATHEMATICAL MODELS IN BIOLOGY (MCS-7924310 A02*); 12 MONTHS \$44,000

CHUNG, KAI L.; PROBABILITY METHODS IN POTENTIAL THEORY AND ANALYSIS (MCS-8001540 A02); 12 MONTHS \$29,924

PHILLIPS, RALPH S.; SCATTERING THEORY (MATHEMATICS) (MCS-8001943 A02); 12 MONTHS \$29,745

GILBARG, DAVID; CLASSICAL AND APPLIED ANALYSIS (MCS-8022267 A01); 12 MONTHS \$82,983

EFRON, BRADLEY, AND STEIN, CHARLES M.; STATISTICAL THEORY AND METHODOLOGY (MCS-8024649 A01); 12 MONTHS \$120,425

OLKIN, INGRAM; MULTI-DIMENSIONAL STATISTICAL ANALYSIS (MATHEMATICAL SCIENCES) (MCS-8104262 A01); 12 MONTHS \$70,637

FEFERMAN, SOLOMON, AND VAN DEN DRIES, L.; MATHEMATICAL LOGIC AND THE FOUNDATIONS OF MATHEMATICS (MCS-8104869 A01); 12 MONTHS \$61,400

ORNSTEIN, DONALD S.; PROBABILITY AND ERGODIC THEORY (MATHEMATICAL SCIENCES) (MCS-8107092 A01); 12 MONTHS \$100,650

OSSERMAN, ROBERT; GEOMETRY OF DIFFERENTIAL MANIFOLDS AND ASSOCIATED PARTIAL DIFFERENTIAL EQUATIONS (MATHEMATICS) (MCS-8107911 A01); 12 MONTHS \$44,900

SWITZER, PAUL; THEORY, METHODS AND APPLICATIONS OF SPATIAL DISCRIMINANT ANALYSIS (MCS-8109584 A01); 12 MONTHS \$18,526

DANTZIG, GEORGE B.; OPTIMIZATION THEORY (MCS-8119774); 12 MONTHS \$56,000

GREEN, PAUL B.; ANALYSIS OF PATTERN DEVELOPMENT IN PLANT EPIDERMIS (MCS-8120495); 12 MONTHS \$8,137

KELLER, JOSEPH B.; MATHEMATICAL PROBLEMS IN VARIOUS APPLIED FIELDS (MCS-8121689); 12 MONTHS \$39,500

EAVES, B CURTIS; COMPUTATION OF FIXED POINTS (MATHEMATICAL SCIENCES) (MCS-8121838); 24 MONTHS \$33,000

SAMELSON, HANS; CONFERENCE ON PARTIAL DIFFERENTIAL EQUATIONS; STANFORD, CALIFORNIA; JULY 12-16, 1982 (MATHEMATICAL SCIENCES) (MCS-8122085); 6 MONTHS \$13,000

KURZ, MORDECAI; STUDIES IN GAME THEORY: REPEATED GAMES, STOCHASTIC GAMES AND VALUE THEORIES (MATHEMATICAL SCIENCES) (MCS-8202093); 12 MONTHS \$29,450

GARRETT, PAUL B.; ARITHMETIC OF FOURIER-JACOBI COEFFICIENTS OF AUTOMORPHIC FORMS (MATHEMATICAL SCIENCES) (MCS-8203334); 12 MONTHS \$11,300

SAMELSON, HANS, AND MILGRAM, R JAMES; ALGEBRA AND TOPOLOGY (MCS-8203806); 12 MONTHS \$82,300

UNIVERSITY OF CALIFORNIA, BERKELEY

KIRBY, ROBION C.; ALGEBRAIC AND DIFFERENTIAL TOPOLOGY (MATHEMATICS) (MCS-7721103 A05); 12 MONTHS \$55,000

PITMAN, JAMES W.; OPTIMAL STATISTICAL DESIGNS (MATHEMATICAL SCIENCES) (MCS-7825301 A04); 12 MONTHS \$47,093

SOLOVAY, ROBERT M.; TOPICS IN SET THEORY (MATHEMATICAL SCIENCES) (MCS-7908077 A03); 12 MONTHS \$17,800

FREEDMAN, DAVID, AND DUBINS, LESTER E.; CHANCE PROCESSES (MCS-8002535 A02); 12 MONTHS \$46,755

LE CAM, LUCIEN, AND MILLAR, PRESSLEY W.; STATISTICS AND PROBABILITY (MCS-8002698 A03); 12 MONTHS \$80,172

LE CAM, LUCIEN; PROBABILITY AND STATISTICS: ESTIMATED SAMPLING DISTRIBUTIONS (MATHEMATICAL SCIENCES) (MCS-8002698 A04); 12 MONTHS \$12,000

LAM, TSIT Y.; FIELD THEORY AND QUADRATIC FORMS (MCS-8002854 A02); 12 MONTHS \$14,700

THOMAS, P EMERY, AND HIRSCH, MORRIS W.; TOPOLOGY AND RELATED PROBLEMS IN ALGEBRA (MATHEMATICS) (MCS-8002858 A02); 12 MONTHS \$90,000

KLASS, MICHAEL J.; SUMS OF INDEPENDENT RANDOM ELEMENTS (MCS-8004022 A02); 12 MONTHS \$24,726

MILLER, KEITH; NUMERICAL METHODS FOR PARTIAL DIFFERENTIAL EQUATIONS (MCS-8005784 A02); 12 MONTHS \$22,830

ARVESON, WILLIAM B.; NONLINEAR SPECTRAL THEORY (MCS-8006364 A02); 12 MONTHS \$14,750

MOORE, CALVIN C, AND RIEFFEL, MARC A.; FUNCTIONAL ANALYSIS (MATHEMATICAL SCIENCES) (MCS-8010723 A03); 12 MONTHS \$42,700

SINGER, ISADORE M.; DIFFERENTIAL GEOMETRY (MCS-8023356 A01); 12 MONTHS \$10,500

SINGER, ISADORE M, AND CHERN, SHIING-SH; DIFFERENTIAL GEOMETRY (MATHEMATICS) (MCS-8023356 A02); 12 MONTHS \$169,900

ROSENBLICHT, MAXWELL A.; ASYMPTOTIC ALGEBRA (MCS-8102055 A01); 12 MONTHS \$18,050

SMALE, STEPHEN; GLOBAL ANALYSIS AND APPLICATIONS (MATHEMATICAL SCIENCES) (MCS-8102262 A01); 12 MONTHS \$72,000

DOKSUM, KJELL A.; STATISTICAL PROBLEMS IN CONNECTION WITH MODEL SELECTION (MCS-8102849 A01); 12 MONTHS \$13,834

PROTTER, MURRAY H, AND HALD, OLE H.; PARTIAL DIFFERENTIAL EQUATIONS WITH APPLICATIONS TO EIGENVALUE PROBLEMS, INVERSE PROBLEMS, AND REACTION/DIFFUSION PROCESSES (MCS-8102508 A01); 12 MONTHS \$24,000

MC KENZIE, RALPH; MODEL THEORY AND UNIVERSAL ALGEBRA (MCS-8103455 A01); \$10,800

GALE, DAVID; MATHEMATICAL ECONOMICS AND GAME THEORY (MCS-8104259 A01); 12 MONTHS \$20,600

FELDMAN, JACOB: TOPICS IN ANALYSIS, PROBABILITY AND MATHEMATICAL PHYSICS (MCS-8107046 A01*); 12 MONTHS \$66,550
CORDES, H. O. AND KATO, TOSIO: PARTIAL DIFFERENTIAL EQUATIONS AND OPERATOR THEORY (MATHEMATICAL SCIENCES) (MCS-8200171); 12 MONTHS \$46,750

KOBAYASHI, SHOSHICHI, AND WOLF, JOSEPH A.: LIE GROUPS AND DIFFERENTIAL GEOMETRY (MATHEMATICS) (MCS-8200235); 12 MONTHS \$51,300

CHENG, CHING-SHU: DESIGNS OF STATISTICAL EXPERIMENTS (MATHEMATICAL SCIENCES) (MCS-8200909); 12 MONTHS \$10,068

LEHMANN, ERICH L.: STATISTICAL INFERENCE (MATHEMATICAL SCIENCES) (MCS-8201498); 24 MONTHS \$56,500

FELDMAN, JACOB: AN APPROXIMATE ORBIT APPROACH TO THE CONSTRUCTION OF PSEUDO-ANOSOV MAPS (MATHEMATICAL SCIENCES) (MCS-8202055); 24 MONTHS \$23,300

PITMAN, JAMES W.: MARKOV PROCESSES (MATHEMATICAL SCIENCES) (MCS-8202552); 12 MONTHS \$21,336

GOLDSCHMIDT, DAVID M. AND BERGMAN, GEORGE: FINITE GROUPS AND NON-COMMUTATIVE RINGS (MATHEMATICAL SCIENCES) (MCS-8202632); 12 MONTHS \$21,750

HARTSHORNE, ROBIN C. AND OGUS, ARTHUR: ALGEBRAIC GEOMETRY AND NUMBER THEORY (MATHEMATICAL SCIENCES) (MCS-8202651); 12 MONTHS \$66,750

SATAKE, ICHIRO: ALGEBRAIC GROUPS AND ABELIAN VARIETIES (MATHEMATICAL SCIENCES) (MCS-8203609); 12 MONTHS \$18,200

VAUGHT, ROBERT L. AND SILVER, JACK H.: FOUNDATIONS OF MATHEMATICS: MODEL THEORY, RECURSION THEORY, AND SET THEORY (MATHEMATICS) (MCS-8204909); 12 MONTHS \$74,300

NEWELL, GORDON F.: APPLICATIONS OF MATHEMATICS TO TRANSPORTATION STUDIES (MATHEMATICAL SCIENCES) (MCS-8205407); 24 MONTHS \$38,800

UNIVERSITY OF CALIFORNIA, DAVIS

BHATTACHARYA, P. K.: DECISION THEORY, STATISTICAL INFERENCE AND ERGODIC THEORY (MCS-8002179 A02); 12 MONTHS \$14,953

KRENER, ARTHUR J.: NONLINEAR SYSTEMS UNDER FEEDBACK (MCS-8003263 A02*); 12 MONTHS \$8,185

BHATTACHARYA, P. K.: ASYMPTOTIC METHODS IN STATISTICS (MATHEMATICAL SCIENCES) (MCS-8101976 A01); 24 MONTHS \$35,335

PLANT, RICHARD E.: REACTION-DIFFUSION MODELS IN BIOLOGY (MATHEMATICAL SCIENCES) (MCS-8121413); 24 MONTHS \$27,250

MANGEL, MARC S.: CONTROL, DECISION, AND SEARCH PROBLEMS ASSOCIATED WITH FISHERIES AND PEST MANAGEMENT (MATHEMATICAL SCIENCES) (MCS-8121659); 12 MONTHS \$16,350

MACK, YUE-POK: STATISTICAL CURVE ESTIMATION (MATHEMATICAL SCIENCES) (MCS-8213801); 24 MONTHS \$23,063

UNIVERSITY OF CALIFORNIA, IRVINE

EKLOF, PAUL C.: LOGIC AND ALGEBRA (MATHEMATICAL SCIENCES) (MCS-8003591 A02); 12 MONTHS \$13,300

KLEIN, ABEL: STOCHASTIC PROCESSES ASSOCIATED WITH QUANTUM SYSTEMS (MATHEMATICAL SCIENCES) (MCS-8202045); 12 MONTHS \$22,700

UNIVERSITY OF CALIFORNIA, LOS ANGELES

MARTIN, DONALD A. AND MOSCHOVAKIS, YIANNIS N.: RECURSION THEORY AND SET THEORY (MCS-7802989 A05); \$14,500

MOSCHOVAKIS, YIANNIS N. AND MARTIN, DONALD A.: RECURSION THEORY AND SET THEORY (MATHEMATICS) (MCS-7802989 A06); 12 MONTHS \$58,300

COOK-IOANNIDIS, L. PAMELA: MATHEMATICAL PROBLEMS IN TRANSONIC FLOW (MATHEMATICS) (MCS-8002203 A01); 24 MONTHS \$26,200

CURTIS, PHILIP C.: AUTOMATIC CONTINUITY AND RADICAL BANACH ALGEBRAS (MCS-8002557 A02); 12 MONTHS \$31,000

GAMELIN, THEODORE W.: FUNCTIONAL ANALYSIS AND FUNCTION THEORY (MCS-8002555 A03); 12 MONTHS \$60,450

EDWARDS, ROBERT D. AND HATCHER, ALLEN E.: GEOMETRY AND TOPOLOGY OF MANIFOLDS (MATHEMATICAL SCIENCES) (MCS-8003571 A02); 12 MONTHS \$28,200

TAKESAKI, MASAMICHI: OPERATOR ALGEBRAS (MCS-8101589 A01); 12 MONTHS \$45,500

RALSTON, JAMES V.: HYPERBOLIC PARTIAL DIFFERENTIAL EQUATIONS AND SCATTERING THEORY (MCS-8101656 A01); 12 MONTHS \$33,405

CANTOR, DAVID G.: COMBINATORICS, ALGEBRA, AND NUMBER THEORY (MCS-8102519 A01); 12 MONTHS \$46,650

LANGE, CHARLES: SINGULAR PERTURBATION ANALYSIS OF NONAUTONOMOUS BOUNDARY VALUE PROBLEMS WITH MULTIPLE SOLUTIONS (MATHEMATICAL SCIENCES) (MCS-8104258 A01); 24 MONTHS \$24,700

VARADARAJAN, V. S.: HARMONIC ANALYSIS AND DIFFERENTIAL EQUATIONS ON REDUCTIVE GROUPS AND LOCALLY SYMMETRIC SPACES (MATHEMATICAL SCIENCES) (MCS-8200639); 12 MONTHS \$27,400

FATTORINI, HECTOR O.: CONTROL THEORY OF PARTIAL DIFFERENTIAL AND HEREDITARY EQUATIONS - SYSTEM THEORY - SINGULAR PERTURBATIONS (MATHEMATICAL SCIENCES) (MCS-8200645); 36 MONTHS \$44,185

OSHER, STANLEY J.: APPLIED PARTIAL DIFFERENTIAL EQUATIONS AND NUMERICAL ANALYSIS (MATHEMATICAL SCIENCES) (MCS-8200788); 12 MONTHS \$46,950

GEOFFRION, ARTHUR M.: RESEARCH ON AGGREGATION AND MODELING (SES-8200921*); 12 MONTHS \$10,000

GREENE, ROBERT E.: DIFFERENTIAL GEOMETRY (MATHEMATICS) (MCS-8200924); 12 MONTHS \$44,500

STRAUS, ERNST G.: COMBINATORIAL NUMBER THEORY (MATHEMATICAL SCIENCES) (MCS-8203347); 36 MONTHS \$6,150

UNIVERSITY OF CALIFORNIA, RIVERSIDE

RATLIFF, LOUIS J.: ON VARIOUS CHAIN CONDITIONS FOR PRIME IDEALS (MCS-8001597 A02); 12 MONTHS \$16,400

HARPER, LAWRENCE H.: GLOBAL THEORIES OF COMBINATORICS (MATHEMATICAL SCIENCES) (MCS-8201725); 24 MONTHS \$24,900

BLOCK, RICHARD E.: CLASSIFICATION OF SIMPLE LIE ALGEBRAS OF PRIME CHARACTERISTIC AND REPRESENTATIONS OF SEMISIMPLE LIE ALGEBRAS AND WEYL ALGEBRAS (MATHEMATICAL SCIENCES) (MCS-8201828); 12 MONTHS \$17,200

UNIVERSITY OF CALIFORNIA, SAN DIEGO

ENRIGHT, THOMAS J.: A STUDY OF HARISH-CHANDRA MODULES (MCS-7802896 A04); 12 MONTHS \$12,700

RICE, JOHN A.: SMOOTHING AND DECONVOLUTION (MATHEMATICAL SCIENCES) (MCS-7901800 A02); 24 MONTHS \$26,462

OLSHEN, RICHARD A.: INFERENCE ON VECTOR DATA (MCS-7906228 A02); \$10,000

GETTOOR, RONALD K.: MARKOV PROCESSES AND RELATED TOPICS (MCS-7923922 A02); 12 MONTHS \$31,495

HELTON, J. WILLIAM: OPERATOR THEORY MOTIVATED BY THEORETICAL ENGINEERING AND BY PARTIAL DIFFERENTIAL EQUATIONS (MCS-8001698 A02*); 12 MONTHS \$17,500

ANDERSON, DONALD W.: ALGEBRAIC TOPOLOGY: HOMOTOPY THEORY AND LOW DIMENSIONAL SURGERY (MATHEMATICAL SCIENCES) (MCS-8004661 A02); 12 MONTHS \$44,100

HAFF, LEONARD R.: ESTIMATION OF THE MULTIVARIATE NORMAL COVARIANCE MATRIX WITH APPLICATIONS (MCS-8101937 A01); 12 MONTHS \$10,108

RODIN, BURTON: CONFORMAL MAPPING, EXTREMAL LENGTH AND RIEMANN SURFACES (MCS-8103436 A01); 12 MONTHS \$33,025

MILES, JOHN W.: STUDIES IN GEOPHYSICAL FLUID DYNAMICS AND APPLIED MATHEMATICS (OCE-8117539*); 12 MONTHS \$10,000

SMALL, LANCE: ADDITIVITY PRINCIPLES AND GELFAND-KIRILLOV DIMENSION IN NOETHERIAN RINGS (MATHEMATICS: RING THEORY) (MCS-8200770); 24 MONTHS \$30,900

CARLSSON, GUNNAR: SEGAL'S CONJECTURE AND FREE GROUP ACTIONS ON COSET SPACES (MATHEMATICS) (MCS-8201195); 24 MONTHS \$22,000

GARSIA, ADRIANO M.: BIJECTIVE COMBINATORICS, PARTIALLY ORDERED SETS, AND Q-SERIES IDENTITIES (MATHEMATICS: COMBINATORICS) (MCS-8202333); 12 MONTHS \$28,800

STARK, HAROLD M.: GENERAL CLASS NUMBER PROBLEMS (MATHEMATICAL SCIENCES) (MCS-8202563); 12 MONTHS \$20,800

UNIVERSITY OF CALIFORNIA, SANTA BARBARA

BRUCKNER, ANDREW M.: PROBLEMS CONCERNING THE DIFFERENTIATION OF REAL FUNCTIONS (MCS-8001787 A02); 12 MONTHS \$17,128

BACHMUTH, SEYMOUR: AUTOMORPHISMS OF SOLVABLE GROUPS AND POLYNOMIAL RINGS (MCS-8101904 A01); 12 MONTHS \$26,500

NEWMAN, MORRIS: INTEGRAL MATRICES (MATHEMATICAL SCIENCES) (MCS-8102224 A01); 12 MONTHS \$10,256

FAN, KY: FUNCTIONAL ANALYSIS (MATHEMATICAL SCIENCES) (MCS-8201544); 12 MONTHS \$20,650

AKEMANN, CHARLES A.: OPERATOR ALGEBRAS AND LOCALLY COMPACT GROUPS (MCS-8201545); 24 MONTHS \$32,100

SOBEL, MILTON: DIRICHLET DISTRIBUTIONS, RANKING AND SELECTION, AND GROUP TESTING (MATHEMATICAL SCIENCES) (MCS-8202247); 12 MONTHS \$26,000

UNIVERSITY OF CALIFORNIA, SANTA CRUZ

WIDOM, HAROLD: RESEARCH IN PSEUDODIFFERENTIAL OPERATORS (MCS-8002320 A03); 12 MONTHS \$19,641

FRIED, DAVID: DYNAMICAL SYSTEMS AND TOPOLOGY (MATHEMATICS) (MCS-8003622 A01); 24 MONTHS \$18,600

MASON, GEOFFREY: FINITE GROUP THEORY AND APPLICATIONS (MCS-8101718 A01); 12 MONTHS \$10,500

GUCKENHEIMER, JOHN, AND TROMBA, ANTHONY J.: GLOBAL ANALYSIS: DYNAMICAL SYSTEMS AND VARIATIONAL PROBLEMS (MATHEMATICS) (MCS-8202260); 24 MONTHS \$63,900

UNIVERSITY OF SOUTHERN CALIFORNIA

BRUCK, RONALD E. AND REICH, SIMON: NONLINEAR EVOLUTION SYSTEMS IN INFINITE DIMENSIONAL BANACH SPACES (MCS-8102086 A01); 12 MONTHS \$24,240

KAC, MARK: MATHEMATICAL PHYSICS (MATHEMATICS) (MCS-8300675); 24 MONTHS \$55,000

SANDERS, RICHARD: NUMERICAL ANALYSIS AND APPLIED PARTIAL DIFFERENTIAL EQUATIONS (MATHEMATICAL SCIENCES) (MCS-8200676); 24 MONTHS \$24,100

JOHNSON, RUSSELL A.: THE KORTEWEG-DEVRIS EQUATION AND ALMOST PERIODIC LINEAR SYSTEMS (MATHEMATICS) (MCS-8201261); 24 MONTHS \$24,850

HARRIS, THEODORE E.: STOCHASTIC FLOWS (MATHEMATICAL SCIENCES) (MCS-8201346); 12 MONTHS \$23,912

COLORADO

COLORADO STATE UNIVERSITY

THOMAS, JAMES W.: REGIONAL CONFERENCE ON THE MATHEMATICAL THEORY OF LAMINAR COMBUSTION: FORT COLLINS, COLORADO; JUNE 14-18, 1983 (MCS-8201634); 6 MONTHS \$18,902

MIRANDA, HENRY P.: DEGENERATION OF KAPPA = 0 CURVES AND SURFACES (MATHEMATICAL SCIENCES) (MCS-8202021); 24 MONTHS \$21,300

GAINES, ROBERT E. EXISTENCE OF SOLUTIONS TO HAMILTONIAN SYSTEMS OF ECONOMIC DYNAMICS (MATHEMATICAL SCIENCES) (MCS-8202309); 24 MONTHS \$32,700

RESNICK, SIDNEY I. EXTREME VALUES, STABLE LAWS, AND STOCHASTIC MODELS (MATHEMATICAL SCIENCES) (MCS-8202335); 12 MONTHS \$40,634

ROCKY MOUNTAIN MATHEMATICS CONSORTIUM INC

SHERMAN, THOMAS L. REGIONAL CONFERENCE ON COMPETITION MODELS IN ECOLOGY: UTAH STATE UNIVERSITY, LOGAN, UTAH; JULY 12-16, 1982 (MCS-8203816); 6 MONTHS \$19,948

UNIVERSITY OF COLORADO AT BOULDER

SATHER, DUANE P. APPLICATIONS OF PARTIAL DIFFERENTIAL EQUATIONS AND GROUP REPRESENTATIONS TO NONLINEAR SHELL THEORY (MCS-7923650 A02*); 12 MONTHS \$7,447

EASTON, ROBERT. TOPOLOGICAL METHODS IN HAMILTONIAN MECHANICS AND ERGODIC THEORY (MATHEMATICS) (MCS-8202300 A01); 24 MONTHS \$26,877

BAGGETT, LAWRENCE W. AND MARTIN, WALTER. LOCALLY COMPACT GROUPS (MCS-8002485 A02); 12 MONTHS \$24,075

HOLLEY, RICHARD, AND STROOCK, DANIEL W. DIFFUSION PROCESSES AND RELATED TOPICS (MATHEMATICAL SCIENCES) (MCS-8007300 A02); 12 MONTHS \$31,042

RAMSAY, ARLAN. LOCALLY COMPACT GROUPS (MCS-8102035 A01); 12 MONTHS \$13,500

ELLIOTT, PETER D T A. ANALYTIC AND PROBABILISTIC THEORY OF NUMBERS (MATHEMATICAL SCIENCES) (MCS-8200610); 24 MONTHS \$31,950

JONES, WILLIAM B. AND THRON, WOLFGANG J. PADE AND OTHER RATIONAL APPROXIMATION: MOMENT THEORY (MATHEMATICAL SCIENCES) (MCS-8202230); 12 MONTHS \$32,158

LAVER, RICHARD J. MATHEMATICAL SET THEORY: LARGE CARDINALS, FORCING, AND COMBINATORICS (MCS-8203999); 24 MONTHS \$26,900

CONNECTICUT

SIAM INSTITUTE FOR MATH & SOCIETY (SIMS)

THOMSEN, DONALD L. STATISTICS & ENVIRONMENTAL FACTORS IN HEALTH (MATHEMATICAL SCIENCES) (MCS-8204409); 12 MONTHS \$30,000

UNIVERSITY OF CONNECTICUT

TOLLEFSON, JEFFREY L. FINITE GROUP ACTIONS ON 3-MANIFOLDS (MATHEMATICS) (MCS-8202182); 24 MONTHS \$34,600

YALE UNIVERSITY

SELIGMAN, GEORGE B. ALGEBRA AND GROUP THEORY (MCS-7904473 A06); \$18,800

BALINSKI, MICHEL L. MATHEMATICAL MODELING AND AXIOMATIZATION OF APPORTIONMENT SCHEMES AND OF GROUP DECISION DEVICES (MCS-7913140 A05); \$6,597

ZUCKERMAN, GREGG J. REPRESENTATIONS OF LIE GROUP (MATHEMATICS: ANALYSIS) (MCS-8005151 A01); 24 MONTHS \$54,236

HARTIGAN, JOHN A. CLUSTERING ALGORITHMS (COMPUTER RESEARCH, STATISTICS) (MCS-8102280 A01*); 12 MONTHS \$23,000

BEALS, RICHARD W. AND COIFMAN, RONALD R. PARTIAL DIFFERENTIAL EQUATIONS AND ANALYSIS (MCS-8104334 A01); 12 MONTHS \$51,775

BEALS, RICHARD W. CONFERENCE IN MODERN ANALYSIS AND PROBABILITY: NEW HAVEN, CONNECTICUT; JUNE 8-11, 1982 (MATHEMATICAL SCIENCES) (MCS-8118339); 12 MONTHS \$14,000

SELIGMAN, GEORGE B. REPRESENTATION THEORY OF FINITE GROUPS: AND ASSOCIATIVE AND NON-ASSOCIATIVE ALGEBRAS (MATHEMATICAL SCIENCES) (MCS-8201333); 12 MONTHS \$87,600

MACINTYRE, ANGUS J. PURE AND APPLIED MODEL THEORY (MATHEMATICAL LOGIC AND ALGEBRA) (MCS-8202294); 24 MONTHS \$93,000

MASSEY, WILLIAM S. COHOMOLOGY OF ALGEBRAIC GROUPS AND RELATED TOPICS (MATHEMATICS) (MCS-8202863); 12 MONTHS \$29,500

MOSTOW, GEORGE D. THEORY OF LIE GROUPS (MATHEMATICAL SCIENCES) (MCS-8203604); 12 MONTHS \$130,800

DELAWARE

UNIVERSITY OF DELAWARE

HILL, ROBERT N. LOWER BOUNDS TO EIGENVALUES IN ATOMIC PHYSICS (PHY-8106771 A01*); 12 MONTHS \$16,400

KLEINMAN, RALPH E. AND ANGELL, THOMAS S. INTEGRAL EQUATIONS AND OPTIMAL CONTROL IN CLASSICAL SCATTERING (MATHEMATICAL SCIENCES) (MCS-8202033); 12 MONTHS \$33,350

NEUTS, MARCEL P. ALGORITHMIC METHODS FOR PROBLEMS IN QUEUEING THEORY AND APPLIED PROBABILITY (ECS-8205404*); 12 MONTHS \$20,000

DISTRICT OF COLUMBIA

AMERICAN STATISTICAL ASSOCIATION

LEONE, FRED C. GROUP TRAVEL FOR U.S. PARTICIPANTS IN THE 43RD SESSION OF THE INTERNATIONAL STATISTICAL INSTITUTE, BUENOS AIRES, ARGENTINA - NOVEMBER 30-DECEMBER 10, 1981 (MCS-8118094); 6 MONTHS \$15,000

ASSOCIATION FOR WOMEN IN MATHEMATICS

SCHAFER, ALICE T. HUGHES, RHONDA J. AND SRINIVASAN, BHAMA. SYMPOSIUM ON MATHEMATICS IN HONOR OF THE CENTENNIAL OF EMMY NOTHER: BRYN MAWR, PENNSYLVANIA; MARCH 15-20, 1982 (MCS-8115471); 6 MONTHS \$13,200

GEORGE WASHINGTON UNIVERSITY

GASTWIRTH, JOSEPH L. METHODS OF STATISTICAL INFERENCE (MCS-8005872 A02); 12 MONTHS \$18,479

HOWARD UNIVERSITY

HINDMAN, NEIL. ULTRAFILTERS AND COMBINATORIAL PARTITION THEORY (MATHEMATICS) (MCS-8100733 A01); 24 MONTHS \$36,800

NATIONAL ACADEMY OF SCIENCES-NATIONAL RESEARCH COUNCIL

FRISHMAN, FRED. PANEL ON EVALUATION OF STATISTICAL SOFTWARE (MCS-8204241*); 9 MONTHS \$9,390

GOLDHABER, J K. SUPPORT OF THE COMMITTEE ON RESOURCES FOR THE MATHEMATICAL SCIENCES (MATHEMATICS) (MCS-8205987); 12 MONTHS \$35,000

FLORIDA

FLORIDA STATE UNIVERSITY

HUNTER, CHRISTOPH. PROBLEMS OF GALAXIES AND APPLIED COMPLEX ANALYSIS (MCS-8026748 A01); 12 MONTHS \$17,726

LACHER, R C. AND BRYANT, JOHN L. TOPOLOGY OF MANIFOLDS (MATHEMATICS) (MCS-8102155 A01); 12 MONTHS \$29,000

BASU, DEBABRATA. FOUNDATIONAL QUESTIONS AND SOME MEASURE-THEORETIC PROBLEMS OF STATISTICS (MATHEMATICS) (MCS-8122014); 24 MONTHS \$38,924

GILMER, ROBERT. ALGEBRAS, POLYNOMIAL RINGS, FINITENESS CONDITIONS, GENERATING SETS AND IDEAL CONTRACTIONS IN COMMUTATIVE ALGEBRA (MATHEMATICS) (MCS-8122095); 12 MONTHS \$20,300

UNIVERSITY OF FLORIDA

TRIGGIANI, ROBERTO, AND LASIECKA, IRENA. MATHEMATICAL SCIENCES: BOUNDARY CONTROL PROBLEMS FOR PARABOLIC AND HYPERBOLIC PARTIAL EQUATIONS (MCS-8102837 A01*); 12 MONTHS \$1,722

CHEN, SU SHING. REGIONAL CONFERENCE ON CLOSED GEODESICS ON RIEMANNIAN MANIFOLDS: GAINESVILLE, FLORIDA; AUGUST 3-6, 1982 (MCS-8122082); 7 MONTHS \$17,653

UNIVERSITY OF MIAMI

FERGUSON, PAMELA A. LINEAR GROUPS OF RELATIVELY SMALL DEGREE AND CERTAIN CONNECTIONS BETWEEN COMBINATORICS AND CHARACTER THEORY (MATHEMATICAL SCIENCES) (MCS-8202004); 24 MONTHS \$37,300

CHEN, ROBERT W. LIMIT THEOREMS IN A FINITELY ADDITIVE SETTING (MATHEMATICAL SCIENCES) (MCS-8202069); 24 MONTHS \$56,170

UNIVERSITY OF SOUTH FLORIDA

SAFF, EDWARD B. SOME PROBLEMS IN CONSTRUCTIVE FUNCTION THEORY (MATHEMATICAL SCIENCES) (MCS-8003185 A01); 24 MONTHS \$35,881

GEORGIA

EMORY UNIVERSITY

EVANS, TREVOR. VARIETIES OF ALGEBRAS (MATHEMATICAL SCIENCES) (MCS-8203615); 12 MONTHS \$21,900

GEORGIA INSTITUTE OF TECHNOLOGY MAIN CAMPUS

JEROSLOW, ROBERT G. NONLINEAR PROGRAMMING AND CUTTING-PLANE THEORY (ECS-8001763 A02*); 12 MONTHS \$14,000

LAYTON, WILLIAM J. FINITE ELEMENT METHODS FOR FIRST ORDER SYSTEMS WITH APPLICATIONS TO MIXED EQUATIONS (MATHEMATICAL SCIENCES) (MCS-8202058*); 24 MONTHS \$20,900

GERONIMO, JEFFREY, AND HARRINGTON, ANDREW N. ORTHOGONAL POLYNOMIALS, JULIA SETS, AND INVARIANT MEASURES (MATHEMATICAL SCIENCES) (MCS-8203325); 12 MONTHS \$20,007

UNIVERSITY OF GEORGIA

SMITH, ROY C. GEOMETRY OF PERIOD MAPPINGS AND ABELIAN VARIETIES (MCS-7903717 A01); 24 MONTHS \$12,400

MCCRORY, CLINTON G. GEOMETRY AND TOPOLOGY OF MANIFOLDS (MATHEMATICS) (MCS-8102759 A01); 12 MONTHS \$35,400

CARLSON, JON F. AND CHASTKOFKY, LEONARD. MODULAR REPRESENTATIONS OF GROUPS (MATHEMATICAL SCIENCES) (MCS-8201469); 12 MONTHS \$22,000

JOHNSON, KENNETH D. AND LICHTENSTEIN, WALTER D. LIE GROUPS AND SYMMETRIC SPACES (MATHEMATICAL SCIENCES) (MCS-8201658); 24 MONTHS \$45,900

AZOFF, EDWARD A. AND CLANCEY, KEVIN F. PROBLEMS IN OPERATOR THEORY AND RELATED ANALYSIS (MATHEMATICAL SCIENCES) (MCS-8201675); 12 MONTHS \$25,000

RUMELY, ROBERT S. CAPACITY THEORY ON ALGEBRAIC CURVES (MATHEMATICAL SCIENCES) (MCS-8201792); 24 MONTHS \$19,550

MCCORMICK, WILLIAM P. STATISTICAL PROBLEMS FOR SUSTAINED MAXIMA (MATHEMATICAL SCIENCES) (MCS-8202259); 12 MONTHS \$10,400

WAGSTAFF, SAMUEL S. COMPUTATIONS IN NUMBER THEORY (MCS-8202356*); 12 MONTHS \$7,488

HAWAII

UNIVERSITY OF HAWAII-MANOA

FRESE, RALPH S. UNIVERSAL ALGEBRA AND LATTICE THEORY (MATHEMATICAL SCIENCES) (MCS-8002311 A01); 24 MONTHS \$25,800

HILE, GERALD N. FIRST ORDER ELLIPTIC SYSTEMS OF PARTIAL DIFFERENTIAL EQUATIONS (MCS-8100801 A01); 12 MONTHS \$10,482

STEGENGA, DAVID A. HARDY SPACES AND DUALITY (MATHEMATICAL SCIENCES) (MCS-8106816 A01); 24 MONTHS \$21,900

ILLINOIS

ILLINOIS INSTITUTE OF TECHNOLOGY

BERNSTEIN, BARRY, AND MALKUS, DAVID S. STEADY FLOWS OF MEMORY FLUIDS WITH FINITE ELEMENTS (MCS-8102089 A01*); 12 MONTHS \$13,008

INDIVIDUAL AWARD

SLAMAN, THEODORE A. MATHEMATICAL SCIENCES POSTDOCTORAL RESEARCH FELLOWSHIP (MCS-8114165 A01); 12 MONTHS \$22,000
 SCHWARZ, STEV. T. MATHEMATICAL SCIENCES POSTDOCTORAL RESEARCH FELLOWSHIP (MCS-8211307); 24 MONTHS \$29,000
 LEEP, DAVID B. MATHEMATICAL SCIENCES POSTDOCTORAL RESEARCH FELLOWSHIP (MCS-8211313); 24 MONTHS \$29,000
 COOMBS, KEVIN R. MATHEMATICAL SCIENCES POSTDOCTORAL RESEARCH FELLOWSHIP (MCS-8211324); 24 MONTHS \$29,000
 CONREY, JOHN B. MATHEMATICAL SCIENCES POSTDOCTORAL RESEARCH FELLOWSHIP (MCS-8211325); 24 MONTHS \$29,000
 CHRIST, FRANCIS M. MATHEMATICAL SCIENCES POSTDOCTORAL RESEARCH FELLOWSHIP (MCS-8211327); 24 MONTHS \$29,000
 BARRETT, DAVID E. MATHEMATICAL SCIENCES POSTDOCTORAL RESEARCH FELLOWSHIP (MCS-8211330); 24 MONTHS \$29,000

NORTHWESTERN UNIVERSITY

MAHOWALD, MARK E. ALGEBRAIC TOPOLOGY (MCS-7827592 A03); \$12,000
 MAHOWALD, MARK E. AND FRIEDLANDER, ERIC M. K-THEORY, GEOMETRY, AND ARITHMETIC (MCS-7827592 A04); \$14,900
 FRIEDMAN, AVNER. PARTIAL DIFFERENTIAL EQUATIONS AND FUNCTIONAL ANALYSIS (MCS-7915171 A02); 12 MONTHS \$25,792
 FRIEDMAN, AVNER. FREE BOUNDARY PROBLEMS: JETS AND CAVITIES (MCS-7915171 A03); \$4,140
 FRIEDMAN, AVNER. MATHEMATICAL SCIENCES: MIDWEST CONFERENCE ON PARTIAL DIFFERENTIAL EQUATIONS (MCS-7915171 A04); \$5,000
 STEIN, MICHAEL R. AND SALLY, JUDITH D. COMMUTATIVE ALGEBRA AND ALGEBRAIC K-THEORY (MCS-8000929 A02); 12 MONTHS \$26,600
 STEIN, MICHAEL R. COMMUTATIVE ALGEBRA AND ALGEBRAIC K-THEORY (MCS-8000929 A03); \$6,350
 FRANKS, JOHN M. WILLIAMS, ROBERT F. AND ROBINSON, R. C. DIFFERENTIABLE DYNAMICAL SYSTEMS (MATHEMATICS) (MCS-8002177 A02); 12 MONTHS \$55,500
 GASPER, GEORGE. SPECIAL FUNCTIONS (MATHEMATICAL SCIENCES) (MCS-8002507 A01); 24 MONTHS \$28,456
 BELLOW, ALEXANDRA. TOPICS IN ANALYSIS AND PROBABILITY (MCS-8002798 A02); 12 MONTHS \$16,950
 MAHOWALD, MARK E. FRIEDLANDER, ERIC M. AND PRIDDY, STEWART B. CONFERENCE ON ALGEBRAIC TOPOLOGY: EVANSTON, ILLINOIS, MARCH 22-26, 1982 (MCS-8117565); 12 MONTHS \$9,250
 PINSKY, MARK A. STOCHASTIC DIFFERENTIAL GEOMETRY (MATHEMATICAL SCIENCES) (MCS-8200453); 24 MONTHS \$35,311
 MAHOWALD, MARK E. AND BARR, T. T. MICHAEL G. ALGEBRAIC TOPOLOGY. HOMOTOPY THEORY AND ALGEBRAIC K-THEORY (MATHEMATICS) (MCS-8200455); 12 MONTHS \$80,400
 MAHOWALD, MARK E. AND FRIEDLANDER, ERIC M. MATHEMATICAL SCIENCES: CONNECTIONS BETWEEN GEOMETRY, TOPOLOGY, AND K-THEORY (MCS-8200455 A01); \$12,000
 DEVINATZ, ALLEN. DIFFERENTIAL EQUATIONS AND FUNCTIONAL ANALYSIS (MATHEMATICAL SCIENCES) (MCS-8200898); 12 MONTHS \$19,850

SOUTHERN ILLINOIS UNIVERSITY - CARBONDALE

GRIMMER, RONALD. RESOLVENTS FOR VOLTERRA INTEGRAL EQUATIONS IN A BANACH SPACE (MATHEMATICAL SCIENCES) (MCS-8201322); 24 MONTHS \$29,900
 FEINSILVER, PHILIP J. AND PAINE, THOMAS B. REGIONAL CONFERENCE ON LARGE DEVIATIONS: CARBONDALE, ILL. JUNE 7-11, 1982 (MCS-8203770); 6 MONTHS \$13,400

UNIVERSITY OF CHICAGO

DOUGLAS, JIM. NUMERICAL ANALYSIS AND PARTIAL DIFFERENTIAL EQUATIONS (MATHEMATICAL SCIENCES) (MCS-7802861 A05); 12 MONTHS \$55,000
 REID, WILLIAM H. ASYMPTOTIC AND NUMERICAL METHODS IN FLUID MECHANICS (MCS-8001576 A02); 12 MONTHS \$32,300
 BAHADUR, RAGHU R. MATHEMATICAL STATISTICS AND PROBABILITY (MCS-8002217 A02); 12 MONTHS \$61,146
 BROWDER, FELIX E. PARTIAL DIFFERENTIAL EQUATIONS AND NON-LINEAR FUNCTIONAL ANALYSIS (MCS-8002306 A02); 12 MONTHS \$29,985
 LASHOF, RICHARD K. GEOMETRIC TOPOLOGY, ALGEBRAIC TOPOLOGY AND HOMOLOGICAL ALGEBRA (MATHEMATICAL SCIENCES) (MCS-8002390 A03); 12 MONTHS \$110,500
 SALLY, PAUL J. GROUP REPRESENTATIONS, HARMONIC ANALYSIS AND ERGODIC THEORY (MCS-8004026 A03); 12 MONTHS \$43,650
 BAILY, WALTER L. AUTOMORPHIC FUNCTIONS, COMPLEX MULTIPLICATION AND NUMBER THEORY (MCS-8101571 A01); 12 MONTHS \$21,000
 STIGLER, STEPHEN M. AND WONG, WING H. MATHEMATICAL STATISTICS (MCS-8101836 A01); 12 MONTHS \$29,978
 SOARE, ROBERT I. RECURSIVE FUNCTION THEORY (MATHEMATICAL SCIENCES) (MCS-8102443 A01); 12 MONTHS \$37,900
 HERSTEIN, ISRAEL N. RING THEORY (MCS-8102472 A01); 12 MONTHS \$20,000
 BLOCH, SPENCER J. ALGEBRAIC K-THEORY AND ALGEBRAIC GEOMETRY (MCS-8102639 A01); 12 MONTHS \$25,450
 LEBOVITZ, NORMAN R. BIFURCATION AND INITIAL-VALUE PROBLEMS IN ASTROPHYSICAL FLUID DYNAMICS (MCS-8102635 A01); 12 MONTHS \$17,950

MAC LANE, SAUNDERS. COHERENCE CONDITIONS AND LARGE CATEGORIES (MCS-8116620); 24 MONTHS \$13,950

KAPLANSKY, IRVING. CLASSIFICATION, BLOCK THEORY AND LOCAL ANALYSIS IN FINITE SIMPLE GROUPS, AND LIE ALGEBRAS AND THEIR REPRESENTATIONS (MATHEMATICAL SCIENCES) (MCS-8202703); 12 MONTHS \$86,400

CALDERON, ALBERTO P. MATHEMATICAL ANALYSIS (MATHEMATICAL SCIENCES) (MCS-8203319); 12 MONTHS \$68,712

BONA, JERRY L. MATHEMATICAL ANALYSIS OF FLUID MOTION (MATHEMATICAL SCIENCES) (MCS-8203338); 12 MONTHS \$36,500

UNIVERSITY OF ILLINOIS AT CHICAGO CIRCLE

UHLERBECK, KAREN K. GEOMETRY AND PARTIAL DIFFERENTIAL EQUATIONS (MCS-7802682 A02); \$8,200

ATKIN, A. O. L. MODULAR FORMS AND COMPUTATIONAL NUMBER THEORY (MATHEMATICAL SCIENCES) (MCS-7802818 A04); 12 MONTHS \$21,400

ITO, NOROBU, AND FONG, PAUL. FINITE DESIGNS AND FINITE GROUPS (MCS-8101689 A01); 12 MONTHS \$50,000

TWERSKY, VICTOR. MANY-BODY THEORY, CONTINUUM MECHANICS, AND MATHEMATICAL BIO-PHYSICS (MCS-8101698 A01); 12 MONTHS \$85,717

TWERSKY, VICTOR. MANY BODY THEORY CONTINUUM MECHANICS & MATHEMATICAL BIO-PHYSICS (MCS-8101698 A02*); \$12,000

WOOD, JOHN W. GEOMETRY AND TOPOLOGY (MATHEMATICS) (MCS-8102219 A01); 12 MONTHS \$36,200

TARTAKOFF, DAVID S. PARTIAL DIFFERENTIAL EQUATIONS AND FUNCTIONS OF SEVERAL COMPLEX VARIABLES (MCS-8102587 A01); 12 MONTHS \$10,473

SRINIVASAN, BHAMA. REPRESENTATIONS OF GROUPS OF LIE TYPE (MATHEMATICS) (MCS-8117533 A01); 24 MONTHS \$29,100

UHLERBECK, KAREN K. VARIATIONAL PROBLEMS IN NON-ABELIAN GAUGE FIELD THEORY (MCS-8200554); 24 MONTHS \$32,200

MASUR, HOWARD. PROBLEMS IN TEICHMULLER AND ERGODIC THEORY (MATHEMATICAL SCIENCES) (MCS-8201310); 24 MONTHS \$24,533

PLESS, VERA. COMPUTER ALGORITHMS IN FINITE GROUPS AND COMBINATORIAL STRUCTURES (MATHEMATICAL SCIENCES) (MCS-8201311*); 12 MONTHS \$17,400

RONAN, MARK A. BUILDINGS: FINITE GEOMETRIES ASSOCIATED TO FINITE GROUPS (MATHEMATICAL SCIENCES) (MCS-8201463); 24 MONTHS \$21,000

RADFORD, DAVID E. REPRESENTATION THEORY FOR UNIPOTENT AND INFINITESIMAL PRO-AFFINE GROUP SCHEMES (MATHEMATICAL SCIENCES) (MCS-8201481); 24 MONTHS \$27,200

UNIVERSITY OF ILLINOIS AT URBANA

RUBEL, LEE A. FACTORIZATION IN SPACES OF ANALYTIC FUNCTIONS (MCS-7925455 A02); 12 MONTHS \$19,487

TING, T. W. APPLIED MATHEMATICS: PROBLEMS IN CONTINUUM MECHANICS AND CONTINUUM GAS DYNAMICS (MCS-8001845 A02); 12 MONTHS \$27,129

BLUMENTHAL, SAUL. ASYMPTOTIC EXPANSIONS AND ROBUST ESTIMATION (MCS-8002340 A02); 12 MONTHS \$28,585

KNIGHT, FRANK B. MARKOV PROCESSES (MCS-8002660 A02); 12 MONTHS \$18,376

KNIGHT, FRANK B. MARKOV PROCESSES (MATHEMATICAL SCIENCES) (MCS-8002660 A03); \$10,792

JOCKUSCH, CARL G. LOGIC AND GROUP THEORY (MATHEMATICS) (MCS-8003251 A02); 12 MONTHS \$73,900

DIAMOND, HAROLD G. AND HALBERSTAM, HEINI. ANALYTIC NUMBER THEORY AND RELATED ANALYSIS (MCS-8101688 A01); 12 MONTHS \$36,000

GRAY, JOHN W. APPLICATIONS OF CLOSED CATEGORIES (MCS-8102351 A01); 12 MONTHS \$16,350

MCCLINDEN, LYNN. STUDIES IN OPTIMIZATION AND EQUILIBRIUM USING METHODS OF CONVEXITY AND MONOTONICITY (MCS-8102684 A01); 12 MONTHS \$14,530

SKEEL, ROBERT D. ERROR ESTIMATION AND CONTROL FOR NUMERICAL SOLUTION OF STIFF DIFFERENTIAL EQUATIONS (MCS-8107046*); 24 MONTHS \$24,455

PALMORE, JULIAN I. RELATIVE EQUILIBRIA OF N-BODY PROBLEMS (MATHEMATICAL SCIENCES) (MCS-8121106); 24 MONTHS \$23,825

LOEB, PETER A. APPLICATIONS OF NONSTANDARD ANALYSIS TO MEASURE THEORY, POTENTIAL THEORY, AND RELATED TOPICS (MCS-8200494); 24 MONTHS \$35,664

BANK, STEVEN B. DIFFERENTIAL EQUATIONS IN THE COMPLEX DOMAIN AND NEVANLINNA THEORY (MATHEMATICAL SCIENCES) (MCS-8200497); 12 MONTHS \$42,983

CHEN, KUO T. ALGEBRAIC TOPOLOGY AND DIFFERENTIAL FORMS (MATHEMATICAL SCIENCES) (MCS-8200775); 24 MONTHS \$42,500

REINER, IRVING. ALGEBRA AND NUMBER THEORY (MATHEMATICAL SCIENCES) (MCS-8201292); 12 MONTHS \$79,800

FOSSUM, ROBERT M. EVANS, E. GRAHAM, AND GRIFFITH, PHILLIP A. MODULES OF SYZYGIES AND INVARIANT THEORY (MATHEMATICS; COMMUTATIVE ALGEBRA) (MCS-8201325); 12 MONTHS \$53,150

WILSMAN, ROBERT A. STATISTICS: SEQUENTIAL AND SIMULTANEOUS INFERENCE, ADMISSIBILITY, AND INVARIANCE (MATHEMATICAL SCIENCES) (MCS-8201771); 12 MONTHS \$54,475

HAKEN, WOLFGANG, AND APPEL, KENNETH I. THREE-DIMENSIONAL TOPOLOGY AND COMBINATORIAL GROUP THEORY (MATHEMATICS) (MCS-8202561); 12 MONTHS \$36,700

GRAYSON, DANIEL R. HIGHER ALGEBRAIC K-THEORY (MCS-8202562); 24 MONTHS \$23,675

BURKHOLDER, DONALD L.; MARTINGALES, EMPIRICAL PROCESSES, AND BROWNIAN MOTION (MATHEMATICAL SCIENCES) (MCS-8203602); 12 MONTHS \$52,324

HAN, SHIH PING; NONLINEAR PROGRAMMING (MATHEMATICAL SCIENCES) (MCS-8203603); 24 MONTHS \$24,650

INDIANA

INDIANA UNIVERSITY, BLOOMINGTON

EDMONDS, ALLAN L.; BRANCHED COVERINGS IN LOW-DIMENSIONAL GEOMETRIC TOPOLOGY (MATHEMATICS) (MCS-7903456 A02); 24 MONTHS \$23,700

STAMPFLI, JOSEPH G.; LOCAL SPECTRAL THEORY, PRINCIPAL FUNCTIONS, QUASI-SIMILARITY AND SIMILARITY (MCS-8001592 A01); 12 MONTHS \$17,816

SCHOBEL, GLENN; GEOMETRIC THEORY OF FUNCTIONS (MATHEMATICS) (MCS-8002400 A01); 24 MONTHS \$29,326

LOWENGRUB, MORTON; CRACK PROBLEMS IN LINEAR ELASTOSTATICS (MATHEMATICAL SCIENCES) (MCS-8025582 A01); \$12,000

BRADLEY, RICHARD C.; PROPERTIES OF STRONG MIXING CONDITIONS FOR STATIONARY RANDOM SEQUENCES (MCS-8101583 A01); 24 MONTHS \$19,433

GLASSEY, ROBERT T.; NONLINEAR PARTIAL DIFFERENTIAL EQUATIONS (MATHEMATICAL SCIENCES) (MCS-8120599); 24 MONTHS \$28,688

CONWAY, JOHN B.; SUBNORMAL OPERATORS (MATHEMATICAL SCIENCES) (MCS-8121201); 24 MONTHS \$30,755

LIVINGSTON, CHARLES; KNOT THEORY AND THE CONCORDANCE GROUP OF KNOTS (MATHEMATICS) (MCS-8121727); 24 MONTHS \$17,400

ZIEMER, WILLIAM P.; GEOMETRIC AND REAL ANALYSIS (MATHEMATICAL SCIENCES) (MCS-8122077); 12 MONTHS \$17,040

CHADAM, JOHN M.; FREE BOUNDARY PROBLEMS WITH APPLICATIONS (MATHEMATICAL SCIENCES) (MCS-8200399); 12 MONTHS \$20,900

DEODHAR, VINAY; GEOMETRY OF BRUHAT CELLS, REPRESENTATIONS OF KAC-MOODY LIE ALGEBRAS AND CENTRAL EXTENSIONS OF ALGEBRAIC GROUPS (MATHEMATICAL SCIENCES) (MCS-8200752); 24 MONTHS \$22,400

HAILE, DARRELL E.; THE BRAUER GROUP (MATHEMATICAL SCIENCES) (MCS-8201118); 24 MONTHS \$21,250

DIBENEDDETTO, EMMANUELE; DOUBLY NONLINEAR EVOLUTION EQUATIONS AND FREE-BOUNDARY PROBLEMS (MATHEMATICAL SCIENCES) (MCS-8202100); 36 MONTHS \$29,800

INDIANA UNIV-PURDUE UNIV AT INDIANAPOLIS

ALIPRANTIS, C. D. AND BURKINSHAW, OWEN; COMPACTNESS OF KERNEL AND ORDER BOUNDED OPERATORS (MCS-8100787 A01); 12 MONTHS \$20,000

PRICE, GEOFFREY L.; DERIVATIONS ON C*-ALGEBRAS AND EXTREMAL TRACES ON C*-ALGEBRAS (MATHEMATICAL SCIENCES) (MCS-8202290); 24 MONTHS \$18,215

PURDUE UNIVERSITY

BROWN, LAWRENCE G.; C*-ALGEBRAS AND OPERATOR THEORY (MCS-7800992 A04); 12 MONTHS \$25,370

PUTNAM, CALVIN R.; AN INVESTIGATION OF HYPONORMAL OPERATORS AND THEIR SPECTRA (MCS-7924029 A02); 12 MONTHS \$20,680

DONNELLY, HAROLD; SOME PROBLEMS INVOLVING SPECTRAL INVARIANTS (MATHEMATICS) (MCS-7924350 A01); 24 MONTHS \$26,500

RICE, JOHN R.; NONLINEAR APPROXIMATION (MCS-7926396 A02); 12 MONTHS \$18,000

BERKOVITZ, LEONARD D.; DIFFERENTIAL GAMES AND OPTIMAL CONTROL (MCS-7927137 A02); 12 MONTHS \$10,145

GAUTSCHI, WALTER; APPLIED ORTHOGONAL POLYNOMIALS (MCS-7927158 A01*); 24 MONTHS \$15,000

HEINZER, WILLIAM J.; GENERALIZATIONS OF LUROTH'S THEOREM, SUBRINGS OF POLYNOMIAL RINGS, AND SOME TOPICS IN COMMUTATIVE RING THEORY (MCS-8002201 A02); 12 MONTHS \$15,450

GOEL, PREM K.; ROLE OF HIERARCHICAL MODELS AND STATISTICAL ASPECTS OF MERGING DATA FILES (MATHEMATICAL SCIENCES) (MCS-8002336 A01); 24 MONTHS \$27,977

ABHYANKAR, SHREERAM; CANONICAL DESINGULARIZATION OF ALGEBRAIC VARIETIES (MATHEMATICAL SCIENCES) (MCS-8002900 A02); 12 MONTHS \$33,500

BECKER, JAMES C.; HOMOTOPY THEORY (MATHEMATICS) (MCS-8005793 A02); 12 MONTHS \$17,000

SHAHIDI, FREYDOON; INTERTWINING OPERATORS, L-FUNCTIONS AND LOCAL COEFFICIENTS (MCS-8101600 A01); 12 MONTHS \$10,450

BERGER, JAMES O.; INVESTIGATIONS IN STATISTICAL DECISION THEORY (MCS-8101670 A01); 12 MONTHS \$50,927

PURI, PREM S.; ON MULTI-COMPARTMENT STOCHASTIC MODELS (MATHEMATICAL STATISTICS) (MCS-8102733 A01); 24 MONTHS \$36,117

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GLISER, LEON JAY; MULTIPARAMETER ESTIMATION AND TESTS OF GOODNESS-OF-FIT (MATHEMATICAL SCIENCES) (MCS-8121948); 12 MONTHS \$38,121

GOFFMAN, CASPER; REAL AND HARMONIC ANALYSIS (MATHEMATICAL SCIENCES) (MCS-8200339); 24 MONTHS \$32,393

LIPMAN, JOSEPH; RESIDUES AND RELATIVE FUNDAMENTAL CLASSES (MATHEMATICAL SCIENCES) (MCS-8200634); 12 MONTHS \$23,500

STUDDEN, WILLIAM J.; OPTIMAL DESIGN OF STATISTICAL EXPERIMENTS (MATHEMATICAL SCIENCES) (MCS-8200631); 12 MONTHS \$35,377

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HAHN, ALEXANDER J.; ISOMORPHISMS OF CLASSICAL GROUPS OVER RINGS (MATHEMATICAL SCIENCES) (MCS-8003106 A02); 24 MONTHS \$26,000

SOMMESE, ANDREW J. AND STOLL, WILHELM F.; THE MIDWEST CONFERENCE ON SEVERAL COMPLEX VARIABLES (MATHEMATICAL SCIENCES) (MCS-8012928 A01); 12 MONTHS \$2,578

TAYLOR, LAURENCE R.; ALGEBRAIC AND GEOMETRIC TOPOLOGY (MATHEMATICS) (MCS-8102204 A01); 12 MONTHS \$62,400

STANTON, NANCY K.; EIGENVALUES OF COMPLEX LAPLACIANS (MATHEMATICAL SCIENCES) (MCS-8200442); 24 MONTHS \$25,511

SOMMESE, ANDREW J.; TRANSCENDENTAL ALGEBRAIC GEOMETRY (MATHEMATICAL SCIENCES) (MCS-8200629); 12 MONTHS \$22,325

STOLL, WILHELM F.; THEORY OF SEVERAL COMPLEX VARIABLES (MATHEMATICAL SCIENCES) (MCS-8201158); 12 MONTHS \$32,382

LOCKHART, ROBERT B.; ELLIPTIC SYSTEMS OF PARTIAL DIFFERENTIAL EQUATIONS (MATHEMATICAL SCIENCES) (MCS-8213522); 24 MONTHS \$20,746

IOWA

IOWA STATE UNIVERSITY OF SCIENCE & TECHNOLOGY

ATHREYA, K. B.; LIMIT THEOREMS FOR BRANCHING PROCESSES AND MARKOV CHAINS (MATHEMATICAL SCIENCES) (MCS-8201456); 24 MONTHS \$31,900

MEEDEN, GLEN; ADMISSIBILITY IN MULTIPARAMETER ESTIMATION AND IN FINITE POPULATION SAMPLING (MATHEMATICAL SCIENCES) (MCS-8202116); 12 MONTHS \$26,823

MADYCH, WOLODYMYR R.; SUMMABILITY METHODS FOR COMPUTED TOMOGRAPHY (MATHEMATICAL SCIENCES) (MCS-8202147*); 24 MONTHS \$26,000

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JENSEN, ROBERT R.; REGULARITY FOR VARIATIONAL INEQUALITIES, QUASI-VARIATIONAL INEQUALITIES AND RELATED NONLINEAR PROBLEMS (MATHEMATICAL SCIENCES) (MCS-8001884 A01); 24 MONTHS \$23,260

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BHAPKAR, VASANT P; EFFICIENT ESTIMATORS TO TEST CRITERIA FOR MODEL FITTING IN CATEGORICAL DATA WITH SMALL SAMPLES (MATHEMATICAL SCIENCES) (MCS-8201631); 24 MONTHS \$35,600
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 SRINIVASAN, CIDAMBI; ADMISSIBILITY IN REGULAR EXPONENTIAL FAMILIES (MATHEMATICAL SCIENCES) (MCS-8212963); 12 MONTHS \$11,698

LOUISIANA

LOUISIANA STATE UNIVERSITY, BATON ROUGE

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FUCHS, LASZLO; ABELIAN GROUPS AND MODULES OVER VALUATION RINGS (MATHEMATICAL SCIENCES) (MCS-8101574 A01); 12 MONTHS \$11,300
 KALKA, MORRIS, AND VITTER, ALBERT L; COMPLEX ANALYSIS (MCS-8101664 A01); 12 MONTHS \$23,160

MARYLAND

INDIVIDUAL AWARD

COGDELL, JAMES W; MATHEMATICAL SCIENCES POSTDOCTORAL RESEARCH FELLOWSHIP (MCS-8211326); 24 MONTHS \$29,000

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SHALIKA, JOSEPH A; REPRESENTATION THEORY AND AUTOMORPHIC FORMS ON THE GENERAL LINEAR GROUPS (MCS-7913799 A02); 12 MONTHS \$17,700
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UNITED STATES NAVAL ACADEMY

SANDERS, THOMAS J; CONFERENCE ON TOPOLOGY; U.S. NAVAL ACADEMY, ANNAPOLIS, MARYLAND; MARCH 11-13, 1982 (MCS-8117462); 12 MONTHS \$5,500

UNIVERSITY OF MARYLAND, COLLEGE PARK

ANTMAN, STUART S; NONLINEAR PROBLEMS OF SOLID MECHANICS (MCS-8001844 A02*); 12 MONTHS \$9,250
 WOLPERT, SCOTT; THE GEOMETRY AND TOPOLOGY OF THE MODULI SPACE OF CURVES (MATHEMATICAL SCIENCES) (MCS-8001894 A01); 24 MONTHS \$24,094
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 COHEN, JOEL M; LOW DIMENSIONAL COMPLEXES AND C^* ALGEBRAS OF GROUPS (MATHEMATICS) (MCS-8002218 A02); 12 MONTHS \$14,000
 BERENSTEIN, CARLOS; COMPLEX ANALYSIS AND HARMONIC ANALYSIS (MATHEMATICAL SCIENCES) (MCS-8100749 A01); 24 MONTHS \$27,760
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 GOLDSTEIN, LARRY J, RAZAR, MICHAEL, AND ZAGIER, DON B; THE THEORY OF NUMBERS (MATHEMATICAL SCIENCES) (MCS-8102211 A01); 12 MONTHS \$41,677
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 LIU, TAI-PING; QUASILINEAR HYPERBOLIC PARTIAL DIFFERENTIAL EQUATIONS AND APPLICATIONS (MATHEMATICAL SCIENCES) (MCS-8102848 A02); \$12,000
 WEI, CHING-ZON; LEAST SQUARES ESTIMATES IN STOCHASTIC REGRESSION MODELS (MATHEMATICAL SCIENCES) (MCS-8103448 A01); 24 MONTHS \$20,000
 GOHBERG, ISRAEL, AND GOLDBERG, SEYMOUR; FACTORIZATION OF OPERATORS (MCS-8103463 A01); 12 MONTHS \$13,000
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 KATOK, ANATOLE, BRIN, MICHAEL, AND RUDOLPH, DANIEL J; TOPICS IN ERGODIC THEORY, DYNAMICAL SYSTEMS AND DIFFERENTIAL GEOMETRY (MCS-8204024); 12 MONTHS \$49,100
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MASSACHUSETTS

ASSOCIATION FOR PHYSICAL & SYSTEMS MATHEMATICS

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 JAFFE, ARTHUR M; MATHEMATICAL PHYSICS (PHY-8203669*); 12 MONTHS \$35,398

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WRIGHT, DAVID J; MATHEMATICAL SCIENCES POSTDOCTORAL RESEARCH FELLOWSHIP (MCS-8211304); 24 MONTHS \$29,000
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MASSACHUSETTS INSTITUTE OF TECHNOLOGY

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 FRIEDMAN, SY DAVID; RECURSION THEORY (MATHEMATICS) (MCS-7906084 A01); 24 MONTHS \$27,400
 QUILLÉN, DANIEL G; GEOMETRY AND ANALYSIS ON MANIFOLDS (MATHEMATICS) (MCS-8006551 A02); 12 MONTHS \$76,700
 MILLER, GARY L; STUDIES INTO THE COMPUTATIONAL COMPLEXITY OF ALGEBRAIC PROBLEMS (COMPUTER RESEARCH) (MCS-8007756 A01*); 24 MONTHS \$13,000

STRANG, W GILBERT; OPTIMAL DESIGN AND THE DUALITY THEORY OF STRUCTURES (MATHEMATICAL SCIENCES) (MCS-8102371 A01); 12 MONTHS \$33,200

SEGAL, IRVING E; MATHEMATICAL ANALYSIS OF FIELDS AND PARTICLES (MCS-8104242 A01); 12 MONTHS \$27,375

PETERSON, FRANKLIN P; ALGEBRAIC TOPOLOGY (MATHEMATICS) (MCS-8104246 A01); 12 MONTHS \$88,300

LUSZTIG, GEORGE; REPRESENTATIONS OF SEMISIMPLE GROUPS OVER A FINITE FIELD (MCS-8104365 A01); 12 MONTHS \$20,300

STANLEY, RICHARD; COMBINATORIAL THEORY (MCS-8104855 A01); 12 MONTHS \$45,400

GESSEL, IRA; ENUMERATIVE COMBINATORICS (MATHEMATICAL SCIENCES) (MCS-8105188 A01); 24 MONTHS \$26,150

KOSTANT, BERTRAM; REPRESENTATION THEORY AND DIFFERENTIAL GEOMETRY (MATHEMATICS) (MCS-8105633 A01); 12 MONTHS \$29,500

CHERNOFF, HERMAN; SEQUENTIAL DESIGN OF EXPERIMENTS (MATHEMATICAL SCIENCES) (MCS-8201732); 12 MONTHS \$30,987

KLEITMAN, DANIEL J, AND MITCHELL, STEPHEN A; STABLE HOMOLOGY THEORY (MATHEMATICS) (MCS-8202074); 24 MONTHS \$24,000

KLEITMAN, DANIEL J, AND GOLDMAN, WILLIAM M; LOCALLY HOMOGENEOUS STRUCTURES IN DIFFERENTIAL TOPOLOGY AND GEOMETRY (MATHEMATICS) (MCS-8202082); 24 MONTHS \$24,800

DUDLEY, RICHARD M; APPLICATIONS OF STOCHASTIC PROCESS IN STATISTICS (MATHEMATICAL SCIENCES) (MCS-8202122); 12 MONTHS \$42,612

HELGAISON, SIGURDUR; MATHEMATICAL ANALYSIS (MATHEMATICAL SCIENCES) (MCS-8202137); 12 MONTHS \$69,063

KLEITMAN, DANIEL J, AND DENCKER, N; OPERATORS OF PRINCIPAL TYPE (MATHEMATICAL SCIENCES) (MCS-8202241); 24 MONTHS \$24,711

YAGER, RODNEY I, AND KLEITMAN, DANIEL J; KUMMER CRITERION FOR HECKE L-FUNCTIONS (MATHEMATICAL SCIENCES) (MCS-8202310); 24 MONTHS \$24,000

KLEITMAN, DANIEL J; COMBINATORIAL ENUMERATION AND OPTIMIZATION IN DISCRETE STRUCTURES (MATHEMATICAL SCIENCES) (MCS-8202555); 12 MONTHS \$42,550

WELSCH, ROY E; ROBUST REGRESSION WITH DEPENDENT ERRORS (MATHEMATICAL SCIENCES) (MCS-8202688); 24 MONTHS \$29,000

KLEIMAN, STEVEN L; ENUMERATIVE ALGEBRAIC GEOMETRY, ALGEBRAS RELATED TO ALGEBRAIC SURFACES, REPRESENTATION THEORY AND LIE ALGEBRAS (MATHEMATICAL SCIENCES) (MCS-8203323); 12 MONTHS \$58,250

GOLDFELD, D; AUTOMORPHIC FUNCTIONS AND ELLIPTIC CURVES (MATHEMATICAL SCIENCES) (MCS-8203624); 12 MONTHS \$13,400

KAC, V; REPRESENTATION THEORY OF INFINITE-DIMENSIONAL LIE ALGEBRAS AND APPLICATIONS (MATHEMATICAL SCIENCES) (MCS-8203739); 12 MONTHS \$30,600

KLEITMAN, DANIEL J, AND HECKMAN, GERRIT J; SYMPLECTIC REDUCTION AND GROUP REPRESENTATIONS (MATHEMATICS) (MCS-8203769); 12 MONTHS \$10,300

ADAMS, JEFFREY; DECOMPOSITION OF THE OSCILLATOR REPRESENTATION (MATHEMATICS) (MCS-8203772); 24 MONTHS \$22,500

MITTER, SANJOY K; WORKSHOP ON THE INTERFACE OF OPERATIONS RESEARCH AND SYSTEMS THEORY (SEPTEMBER 30 - OCTOBER 1, 1982) (ECS-8203885*); 8 MONTHS \$4,000

NORTHEASTERN UNIVERSITY

GAFFNEY, TERENCE J; GEOMETRIC TOPOLOGY (MATHEMATICS) (MCS-8005591 A01); 24 MONTHS \$21,300

WARGA, JACK; OPTIMAL CONTROL AND OPTIMIZATION (MCS-8109079 A01*); 12 MONTHS \$11,157

SHAH, JAYANT; STABILITY OF SURFACE SINGULARITIES (MATHEMATICAL SCIENCES) (MCS-8200454); 12 MONTHS \$19,600

JEKEL, SOLOMON M; DIFFERENTIAL TOPOLOGY (MATHEMATICS) (MCS-8201676); 24 MONTHS \$21,000

GORESKY, R MARK; MORSE THEORY AND INTERSECTION HOMOLOGY OF SINGULAR SPACES (MATHEMATICS) (MCS-8201680); 24 MONTHS \$24,800

TUFTS UNIVERSITY

QUINTO, ERIC T; GENERALIZED AND EXTERIOR RADON TRANSFORMS (MATHEMATICAL SCIENCES) (MCS-8201627); 24 MONTHS \$25,303

UNIVERSITY OF MASSACHUSETTS, AMHERST

KAPLAN, AROLDO G, AND CATTANI, EDUARDO H; VARIATION OF HODGE STRUCTURES (MCS-7903099 A01); \$3,000

BERGER, MELVYN S; NONLINEAR PROBLEMS OF PARTIAL DIFFERENTIAL EQUATIONS AND THEIR APPLICATIONS (MCS-7927287 A02); 12 MONTHS \$19,300

ELLIS, RICHARD S; MATHEMATICAL PHYSICS AND PROBABILITY (MCS-8002149 A03); 12 MONTHS \$15,036

GEMAN, DONALD, HOROWITZ, JOSEPH, AND ROSEN, JAY S; STOCHASTIC PROCESSES AND MATHEMATICAL PHYSICS (MCS-8002940 A02); 12 MONTHS \$38,237

MARTINDALE, WALLACE S; PRIME RINGS (MATHEMATICAL SCIENCES) (MCS-8102675 A01); 12 MONTHS \$16,300

KNIGHTLY, GEORGE H; SOME NONLINEAR MATHEMATICAL PROBLEMS ARISING IN MECHANICS (MATHEMATICAL SCIENCES) (MCS-8201539*); 24 MONTHS \$16,050

HAYES, DAVID R; ARITHMETIC IMPLICATIONS OF ELLIPTIC MODULES OF RANK 1 (MATHEMATICAL SCIENCES) (MCS-8201637); 24 MONTHS \$30,200

CATTANI, EDUARDO H; LOCAL MONODROMY OF VARIATION OF HODGE STRUCTURE (MATHEMATICS) (MCS-8201816); 12 MONTHS \$24,800

WELLESLEY COLLEGE

SHULTZ, FREDERIC W; GEOMETRY OF PURE STATES OF C*-ALGEBRAS (MATHEMATICAL SCIENCES) (MCS-8201730); 24 MONTHS \$32,625

WOODS HOLE OCEANOGRAPHIC INSTITUTION

VERONIS, GEORGE; SUMMER WORKSHOPS IN GEOPHYSICAL FLUID DYNAMICS; WOODS HOLE, MASSACHUSETTS (MATHEMATICAL SCIENCES) (02S-8200450*); 12 MONTHS \$10,000

MICHIGAN

CALVIN COLLEGE

STOB, MICHAEL J; RECURSION THEORY (MATHEMATICS) (MCS-8200032); 24 MONTHS \$17,300

MICHIGAN STATE UNIVERSITY

SYMES, WILLIAM W; INVERSE PROBLEMS FOR HYPERBOLIC PARTIAL DIFFERENTIAL EQUATIONS (MATHEMATICAL SCIENCES) (MCS-8002996 A01); 24 MONTHS \$31,000

FABIAN, VACLAV; MATHEMATICAL STATISTICS AND PROBABILITY (MCS-8102233 A01); 12 MONTHS \$15,410

YOUNG, LAI-SANG; DIFFERENTIABLE DYNAMICAL SYSTEMS (MATHEMATICS) (MCS-8115428 A01); 24 MONTHS \$17,800

AKBULUT, SELMAN; TOPOLOGY OF REAL ALGEBRAIC VARIETIES AND 4-MANIFOLDS (MATHEMATICS) (MCS-8116915 A01); 24 MONTHS \$17,500

AXLER, SHELDON; MULTIPLICATION OPERATORS ON SPACES OF ANALYTIC FUNCTIONS (MATHEMATICAL SCIENCES) (MCS-8200459); 24 MONTHS \$22,650

SHAPIRO, JOEL H; MATHEMATICAL ANALYSIS IN LINEAR METRIC SPACES (MCS-8201157); 24 MONTHS \$26,200

MANDREKAR, V; INFERENCE IN REGRESSION AND LOCALLY ASYMPTOTICALLY NORMAL BOUNDARY CENSORED MODELS (MATHEMATICAL SCIENCES) (MCS-8201291); 24 MONTHS \$27,136

HALL, JONATHAN I; LOCAL CHARACTERIZATION OF SOME GROUPS, GRAPHS, AND GEOMETRIES (MATHEMATICAL SCIENCES) (MCS-8201509); 24 MONTHS \$22,150

CHOW, SHUI-NEE, AND MALLET-PARET, JOHN; DIFFERENTIAL EQUATIONS AND DYNAMICAL SYSTEMS (MATHEMATICAL SCIENCES) (MCS-8201768); 12 MONTHS \$15,050

MEYERHOFF, ROBERT; THE CHERN-SIMONS INVARIANT FOR HYPERBOLIC 3-MANIFOLDS (MATHEMATICS) (MCS-8201827); 24 MONTHS \$16,100

UNIVERSITY OF MICHIGAN-ANN ARBOR

FARRELL, F T; THE TOPOLOGICAL SPACE-FORM PROBLEM (MATHEMATICS) (MCS-7923654 A01); 24 MONTHS \$34,200

HOCHSTER, MELVIN; COMMUTATIVE RINGS AND ALGEBRAIC GEOMETRY (MATHEMATICS) (MCS-8002372 A02); 12 MONTHS \$39,750

HOCHSTER, MELVIN; COMMUTATIVE RINGS AND ALGEBRAIC GEOMETRY (MATHEMATICAL SCIENCES) (MCS-8002372 A03); \$10,700

CESARI, LAMBERTO, AND SMOLLER, JOEL A; AERODYNAMIC AND ELECTROMAGNETIC PROPERTIES OF PLASMAS (MCS-8002337 A03); 12 MONTHS \$52,065

KUPERSHMIIDT, BORIS A; INTEGRABLE TWO-, ONE-, AND ZERO-DIMENSIONAL SYSTEMS (MATHEMATICAL SCIENCES) (MCS-8003104 A01); 24 MONTHS \$13,500

PEARCY, CARL M; OPERATORS ON HILBERT SPACE (MCS-8100798 A01); 12 MONTHS \$30,000

MUIRHEAD, ROBB J; MULTIVARIATE STATISTICAL ANALYSIS (MATHEMATICAL SCIENCES) (MCS-8100763 A01); 24 MONTHS \$34,951

SCOTT, L R; NUMERICAL SOLUTION OF PARTIAL DIFFERENTIAL EQUATIONS (MCS-8101631 A01); 12 MONTHS \$25,376

RATTU, TUDOR S; COMPLETELY INTEGRABLE SYSTEMS AND THEIR PERTURBATIONS (MCS-8101642 A01); 24 MONTHS \$21,000

WOODROOFE, MICHAEL; LARGE SAMPLE APPROXIMATIONS IN THE SEQUENTIAL DESIGN OF EXPERIMENTS (MCS-8101897 A01); 12 MONTHS \$18,317

TAYLOR, B ALAN, AND BURNS, DANIEL M; ANALYTIC AND GEOMETRIC FUNCTION THEORY (MCS-8102051 A01); 12 MONTHS \$52,300

RAYMOND, FRANK A; TOPOLOGY: GROUPS AND MANIFOLDS (MATHEMATICS) (MCS-8102469 A01); 12 MONTHS \$71,000

MAIER, HELMUT; MULTIPLICATIVE STRUCTURE OF INTEGERS FROM SPECIAL SETS (MATHEMATICAL SCIENCES) (MCS-8201545); 24 MONTHS \$21,550

LYNDON, ROGER C; GEOMETRIC METHODS IN COMBINATORIAL GROUP THEORY AND SPORADIC GROUPS AS AUTOMORPHISMS OF ALGEBRAS (MATHEMATICAL SCIENCES) (MCS-8201601); 12 MONTHS \$38,000
 MONTGOMERY, HUGH L. AND LEWIS, DONALD J; DIOPHANTINE ANALYSIS, SIEVE METHODS AND ARITHMETIC GEOMETRY (MATHEMATICAL SCIENCES) (MCS-8201602); 12 MONTHS \$87,800
 GEHRING, F. W.; ANALYSIS IN REAL AND COMPLEX SPACES (MATHEMATICAL SCIENCES) (MCS-8201607); 12 MONTHS \$76,731
 BERCOVICI, HARI, AND PEARCY, CARL M; INVARIANT SUBSPACES AND STRUCTURE THEORY AND OPERATORS (MATHEMATICAL SCIENCES) (MCS-8201614); 24 MONTHS \$21,000

WAYNE STATE UNIVERSITY

SCHOCHET, CLAUDE; OPERATOR ALGEBRAS AND K-THEORY (MATHEMATICAL SCIENCES) (MCS-8001857 A01); 24 MONTHS \$30,000
 FROHARDT, DANIEL E; ALGEBRAS FOR SPORADIC GROUPS (MATHEMATICAL SCIENCES) (MCS-8102205 A01); 24 MONTHS \$21,550
 BROWN, LEON, AND SCHREIBER, BERTRAM M; FUNCTIONAL AND HARMONIC ANALYSIS (MATHEMATICAL SCIENCES) (MCS-8200786); 12 MONTHS \$32,800
 MAKAR-LIMANOV, LEONID; ALGEBRAICALLY CLOSED SKEW FIELDS AND APPLICATIONS (MATHEMATICAL SCIENCES) (MCS-8201115); 24 MONTHS \$20,950
 COHN, WILLIAM S; CARLESON MEASURES FOR FUNCTIONS ORTHOGONAL TO INVARIANT SUBSPACES (MATHEMATICAL SCIENCES) (MCS-8201277); 24 MONTHS \$19,408
 WILKERSON, CLARENCE W; THE ALGEBRAIC TOPOLOGY OF CLASSIFYING SPACES (MATHEMATICS) (MCS-8202185); 12 MONTHS \$16,800

MINNESOTA

INDIVIDUAL AWARD

HALL, GLEN R; MATHEMATICAL SCIENCES POSTDOCTORAL RESEARCH FELLOWSHIP (MCS-8211318); 24 MONTHS \$29,000
 BAUMAN, PATRICIA E; MATHEMATICAL SCIENCES POSTDOCTORAL RESEARCH FELLOWSHIP (MCS-8211329); 24 MONTHS \$29,000

UNIVERSITY OF MINNESOTA

JAIN, NARESH C, OREY, STEVEN, AND PRUITT, WILLIAM E; PROBABILITY THEORY (MCS-7801168 A06); 12 MONTHS \$102,730
 SERRIN, JAMES B; RESEARCH IN THERMODYNAMICS AND PARTIAL DIFFERENTIAL EQUATIONS (MCS-7903535 A03*); 12 MONTHS \$13,750
 SERRIN, JAMES B; THERMODYNAMICS AND PARTIAL DIFFERENTIAL EQUATIONS (MATHEMATICAL SCIENCES) (MCS-7903535 A04); \$8,000
 SPERBER, STEVEN; ARITHMETIC ALGEBRAIC GEOMETRY (MCS-8001865 A02); 12 MONTHS \$12,200
 ROBERTS, JOEL; CLASSIFICATION OF PROJECTIVE ALGEBRAIC VARIETIES AND RESOLUTIONS OF DETERMINANTAL IDEALS (MATHEMATICS) (MCS-8001869 A01); 24 MONTHS \$28,750
 ARONSON, DONALD G; STUDIES IN NONLINEAR ANALYSIS (MCS-8002392 A02); 12 MONTHS \$31,800
 EATON, MORRIS L; MULTIVARIATE STATISTICAL ANALYSIS, STATISTICAL DECISION THEORY AND MULTIVARIATE PROBABILITY INEQUALITIES (MCS-8100762 A01); 12 MONTHS \$19,992
 ARONSON, DONALD G, AND MC GEHEE, RICHARD P; COMPUTER-ASSISTED STUDIES OF DYNAMICAL SYSTEMS (MCS-8101700 A01); 12 MONTHS \$12,120
 ELLIS, ROBERT, AND KEYNES, HARVEY; TOPOLOGICAL DYNAMICS AND DYNAMICAL SYSTEMS (MCS-8102034 A01); 12 MONTHS \$41,680
 ELLIS, ROBERT; TOPOLOGICAL DYNAMICS AND DYNAMICAL SYSTEMS (MATHEMATICAL SCIENCES) (MCS-8102034 A02); \$11,250
 FOOTE, RICHARD M; FINITE GROUPS (MCS-8102064); 24 MONTHS \$20,000
 BERRY, DONALD A; DECISIONS INVOLVING BANDIT PROCESSES: DYNAMIC ALLOCATION OF STOCHASTIC PROCESSES (MCS-8102477 A01); 12 MONTHS \$14,794
 WEINBERGER, HANS F; ANALYSIS OF SOME MODELS IN MATHEMATICAL BIOLOGY AND MECHANICS (MATHEMATICAL SCIENCES) (MCS-8102609 A01); 12 MONTHS \$11,965
 WEINBERGER, HANS F, MILLER, WILLARD, AND SELL, GEORGE R; INSTITUTE FOR MATHEMATICS AND ITS APPLICATIONS: PHASE II (MATHEMATICAL SCIENCES) (MCS-8120789 A01); \$680,000
 WHITE, DENNIS E; REPRESENTATIONS OF THE SYMMETRIC GROUP AND CONSTRUCTIVE METHODS IN COMBINATORICS (MATHEMATICAL SCIENCES) (MCS-8122034*); 24 MONTHS \$13,800
 NI, WEI-MING; SOME NONLINEAR PARTIAL DIFFERENTIAL EQUATIONS IN RIEMANNIAN GEOMETRY AND RELATED TOPICS (MATHEMATICS) (MCS-8200033); 24 MONTHS \$21,200
 MARKUS, LAWRENCE, SIBUYA, YASUTAKA, AND MCGEEHEE, RALPH M; DIFFERENTIAL EQUATIONS AND DYNAMICAL SYSTEMS (MATHEMATICAL SCIENCES) (MCS-8200765); 12 MONTHS \$93,839
 FABLES, EUGENE B; PARTIAL DIFFERENTIAL EQUATIONS AND REAL ANALYSIS (MATHEMATICAL SCIENCES) (MCS-8201035); 12 MONTHS \$17,215
 MESSING, WILLIAM; P-ADIC ARITHMETIC ALGEBRAIC GEOMETRY (MATHEMATICAL SCIENCES) (MCS-8201130); 24 MONTHS \$29,750
 HARDT, ROBERT M; DIFFERENTIAL GEOMETRY: AREA-MINIMIZING HYPERSURFACES (MCS-8201271); 24 MONTHS \$29,500
 BERGER, THOMAS R; REPRESENTATION THEORY OF SOLVABLE GROUPS (MATHEMATICAL SCIENCES) (MCS-8201484); 24 MONTHS \$28,800
 SELL, GEORGE R, AND WEINBERGER, HANS F; CONFERENCE ON COMPUTER ARCHITECTURE AND COMPUTATIONAL MATHEMATICS, MINNEAPOLIS, MINNESOTA, JUNE 2-4, 1982 (MATHEMATICAL SCIENCES) (MCS-8207149*); 6 MONTHS \$5,696

UNIVERSITY OF MINNESOTA AT SAINT PAUL

HINKLEY, DAVID V; STATISTICAL METHODOLOGY: SUBSAMPLING, AND LIKELIHOOD (MATHEMATICAL SCIENCES) (MCS-8201994); 12 MONTHS \$27,700
 BUEHLER, ROBERT J; ANCILLARY STATISTICS AND CONDITIONAL INFERENCE (MATHEMATICAL SCIENCES) (MCS-8202174); 24 MONTHS \$29,658
 DAS GUPTA, SOMESH; MULTIVARIATE ANALYSIS (MATHEMATICAL SCIENCES) (MCS-8202209); 24 MONTHS \$34,272

MISSOURI

UNIVERSITY OF MISSOURI, COLUMBIA

KALTON, NIGEL J; ON NON-LOCALLY CONVEX LINEAR METRIC SPACES (MCS-8001852 A02); 12 MONTHS \$15,450

WASHINGTON UNIVERSITY

ROCHBERG, RICHARD H; SPACES OF ANALYTIC FUNCTIONS (MCS-8002689 A01); 24 MONTHS \$27,900
 SILVERSTEIN, MARTIN L; STOCHASTIC PROCESSES (MCS-8002821 A02); 12 MONTHS \$15,813
 WRIGHT, DAVID; CHARACTERIZING POLYNOMIAL RINGS AND AFFINE N-SPACE (MCS-8002844 A02); 12 MONTHS \$11,350
 WEISS, GUIDO, AND TABLESON, MITCHELL; HARMONIC ANALYSIS ON SPACES OF HOMOGENEOUS TYPE AND INTERPOLATION OF OPERATORS (MATHEMATICAL SCIENCES) (MCS-8200884); 12 MONTHS \$37,450
 JENKINS, JAMES A; GEOMETRIC METHODS IN THE THEORY OF FUNCTIONS (MATHEMATICAL SCIENCES) (MCS-8201654); 24 MONTHS \$29,088
 KORANYI, ADAM; FUNCTION THEORY ON SYMMETRIC SPACES (MATHEMATICAL SCIENCES) (MCS-8201815); 12 MONTHS \$18,842
 MORROW, GREGORY J; INVARIANCE PRINCIPLES IN PROBABILITY THEORY (MATHEMATICAL SCIENCES) (MCS-8202192); 24 MONTHS \$21,300

NEBRASKA

UNIVERSITY OF NEBRASKA AT LINCOLN

GILFEATHER, FRANK L, AND LARSON, DAVID R; OPERATOR ALGEBRAS (MCS-8003617 A02); 12 MONTHS \$21,125
 TONG, YUNG L; SYMPOSIUM ON INEQUALITIES IN STATISTICS AND PROBABILITY; LINCOLN, NEBRASKA, OCTOBER 27-30, 1982 (MATHEMATICAL SCIENCES) (MCS-8205140); 12 MONTHS \$15,000

NEW HAMPSHIRE

DARTMOUTH COLLEGE

BAUMGARTNER, JAMES E; COMBINATORIAL SET THEORY (MATHEMATICS) (MCS-7903376 A01); 24 MONTHS \$36,900
 TRACY, CRAIG A; LATTICE MODEL CALCULATIONS OF SCALING FUNCTIONS (MCS-8102536 A01); 12 MONTHS \$11,340

UNIVERSITY OF NEW HAMPSHIRE, DURHAM

NORDGREN, ERIC A, AND HADWIN, DONALD W; PROBLEMS IN OPERATOR THEORY (MCS-8102497 A01); 12 MONTHS \$25,650

NEW JERSEY

INDIVIDUAL AWARD

RUBIN, KARL C; MATHEMATICAL SCIENCES POSTDOCTORAL RESEARCH FELLOWSHIP (MCS-8114167 A01); 12 MONTHS \$22,000
 MORRISON, DAVID P; MATHEMATICAL SCIENCES POSTDOCTORAL RESEARCH FELLOWSHIP (MCS-8211310); 24 MONTHS \$29,000
 INDIK, ROBERT A; MATHEMATICAL SCIENCES POSTDOCTORAL RESEARCH FELLOWSHIP (MCS-8211315); 24 MONTHS \$29,000

INSTITUTE FOR ADVANCED STUDY

BOMBIERI, ENRICO, BOREL, ARMAND, MILNOR, JOHN W, AND YAU, SHING-TUNG; BASIC RESEARCH IN MATHEMATICS: ALGEBRA, ANALYSIS, TOPOLOGY (MATHEMATICAL SCIENCES) (MCS-8108814 A01); 12 MONTHS \$750,000

PRINCETON UNIVERSITY

KOHN, JOSEPH J; PARTIAL DIFFERENTIAL EQUATIONS (MCS-7908690 A04); 12 MONTHS \$130,141
 STEIN, ELIAS M; HARMONIC ANALYSIS AND DIFFERENTIAL EQUATIONS (MCS-8003072 A03); 12 MONTHS \$92,819
 BURGESS, JOHN P; DESCRIPTIVE SET THEORY, TENSE LOGIC, AND MONADIC SECOND ORDER LOGIC (MATHEMATICS) (MCS-8003254 A01); 24 MONTHS \$31,100
 GUNNING, ROBERT C, AND FORNAESS, JOHN E; PROBLEMS IN COMPLEX ANALYSIS (MCS-8100675 A01); 12 MONTHS \$68,604
 DWORK, BERNARD M, AND SHIMURA, GORO; ANALYTIC AND ALGEBRAIC METHODS IN GEOMETRY AND NUMBER THEORY (MCS-8100744 A01); 12 MONTHS \$148,000
 DWORK, BERNARD M, AND SHIMURA, GORO; ANALYTIC AND ALGEBRAIC METHODS IN GEOMETRY AND NUMBER THEORY (MATHEMATICAL SCIENCES) (MCS-8100744 A02); \$32,700
 NELSON, EDWARD, AND ALMGREN, FREDERICK J; APPLICATIONS OF FUNCTIONAL ANALYSIS AND GEOMETRIC MEASURE THEORY (MATHEMATICS) (MCS-8101877 A01); 12 MONTHS \$63,600
 LIEB, ELLIOTT; STATISTICAL MECHANICS AND THE QUANTUM AND CLASSICAL MANY BODY PROBLEMS (PHY-8116101*); 12 MONTHS \$30,000
 BROWDER, WILLIAM, AND HSIANG, WU-CHUNG; MANIFOLDS AND ALGEBRAIC TOPOLOGY (MATHEMATICS) (MCS-8201604); 12 MONTHS \$233,700
 WILES, ANDREW J; MATHEMATICAL SCIENCES: UNRAMIFIED ABELIAN EXTENSIONS OF NUMBER FIELDS (MCS-8217647); 12 MONTHS \$16,250

RUTGERS UNIVERSITY-BUSCH CAMPUS

GUNDY, RICHARD F. MARTINGALE THEORY AND PROBLEMS IN ANALYSIS (MCS-8102073 A01); 12 MONTHS \$30,400

GORENSTEIN, DANIEL; FINITE SIMPLE GROUPS (MCS-8102394 A01); \$9,520

NUSSBAUM, ROGER; NONLINEAR FUNCTIONAL ANALYSIS (MATHEMATICAL SCIENCES) (MCS-8201316); 12 MONTHS \$16,612

SINNOTT, WARREN M. AND LEBOWITZ, JOEL L. P-EXTENSIONS OF CM FIELDS AND IWASAWA MODULES (MATHEMATICAL SCIENCES) (MCS-8202161); 12 MONTHS \$9,800

CORWIN, LAWRENCE; HARMONIC ANALYSIS, REPRESENTATION THEORY AND PARTIAL DIFFERENTIAL EQUATIONS (MATHEMATICAL SCIENCES) (MCS-8202243); 24 MONTHS \$33,300

RUTGERS UNIVERSITY-CAMDEN CAMPUS

JACOBOWITZ, HOWARD; INDUCED GEOMETRIES AND REALIZATION PROBLEMS (MATHEMATICS) (MCS-8003048 A01); 24 MONTHS \$22,900

RUTGERS UNIVERSITY-NEWARK CAMPUS

SHELSTAD, DIANA F. LOCAL HARMONIC ANALYSIS WITH APPLICATIONS TO AUTOMORPHIC REPRESENTATIONS (MCS-8102392 A01); 24 MONTHS \$24,200

RUTGERS UNIVERSITY

SUSSMANN, HECTOR J. MATHEMATICS AND APPLIED ASPECTS OF SYSTEMS THEORY (MCS-7802442 A04); 12 MONTHS \$23,700

WALLACH, NOLAN R. DIFFERENTIAL GEOMETRY AND REPRESENTATION (MATHEMATICS) (MCS-7903153 A03); 12 MONTHS \$21,800

PETRIE, TED E. SMOOTH ACTIONS OF COMPACT LIE GROUPS (MATHEMATICS) (MCS-7903234 A02); 12 MONTHS \$22,900

BERK, ROBERT H. STATISTICAL THEORY (MCS-8001789 A03); 12 MONTHS \$23,364

LEPOWSKY, JAMES, AND WILSON, ROBERT L. LIE ALGEBRAS (MATHEMATICAL SCIENCES) (MCS-8003000 A03); 12 MONTHS \$30,950

PETRYSHYN, WALTER V. NONLINEAR FUNCTIONAL ANALYSIS AND ITS APPLICATIONS (MCS-8003002 A02); 12 MONTHS \$21,000

FALK, RICHARD S. FINITE ELEMENT METHODS FOR CONSTRAINED AND ILL-POSED VARIATIONAL PROBLEMS (MATHEMATICAL SCIENCES) (MCS-8003008 A01); 24 MONTHS \$31,900

BARBASCH, DAN; PRIMITIVE IDEALS AND THE ORBIT METHOD FOR LIE GROUPS (MCS-8003075 A01); 24 MONTHS \$20,500

WALSH, BERTRAM J. LINEAR OPERATORS ON HARMONIC FIELDS AND FUNCTIONS (MATHEMATICAL SCIENCES) (MCS-8003077 A02); 12 MONTHS \$20,450

MUCKENHOUT, BENJAMIN, AND WHEEDEN, RICHARD L. NORM INEQUALITIES FOR CLASSICAL OPERATORS (MATHEMATICS) (MCS-8003098 A02); 12 MONTHS \$40,382

TAYLOR, JEAN E. CRYSTALLINE VARIATIONAL PROBLEMS (MATHEMATICS) (MCS-8003583 A02); 12 MONTHS \$13,200

SHANESON, JULIUS L. ALGEBRAIC AND DIFFERENTIAL TOPOLOGY (MATHEMATICS) (MCS-8026053 A01); 12 MONTHS \$80,000

GORENSTEIN, DANIEL; FINITE SIMPLE GROUPS (MATHEMATICAL SCIENCES) (MCS-8102394 A02); 12 MONTHS \$50,950

SIMS, CHARLES C. GROUP-THEORETIC ALGORITHMS (MATHEMATICAL SCIENCES) (MCS-8102431 A01); 12 MONTHS \$28,600

TREVES, FRANCOIS J. LINEAR PARTIAL DIFFERENTIAL EQUATIONS (MCS-8102435 A01); 12 MONTHS \$22,077

LEBOWITZ, JOEL L. BASIC STUDIES IN STATISTICAL MECHANICS (DMR-8114796); 12 MONTHS \$9,000

COHEN, ARTHUR, AND STRAWDERMAN, WILLIAM E. ADMISSIBLE STATISTICAL PROCEDURES (MCS-8118564); 12 MONTHS \$38,318

ROCHA, ALVANY, AND LEBOWITZ, JOEL L. CHARACTER FORMULAS FOR IRREDUCIBLE HIGHEST WEIGHT MODULES OVER GRADED LIE ALGEBRAS (MATHEMATICAL SCIENCES) (MCS-8201260); 24 MONTHS \$20,500

BEALS, R. MICHAEL; MICROLOCAL ANALYSIS OF SOLUTIONS TO SEMI-LINEAR WAVE EQUATIONS (MATHEMATICAL SCIENCES) (MCS-8201281); 24 MONTHS \$19,170

STEVENS, GLENN; CONGRUENCES FOR SPECIAL VALUES OF L-FUNCTIONS ATTACHED TO ELLIPTIC MODULAR FORMS (MATHEMATICAL SCIENCES) (MCS-8201762); 24 MONTHS \$20,500

NEW MEXICO

NEW MEXICO STATE UNIVERSITY

WALKER, ELBERT A. ABELIAN GROUPS (MCS-8003060 A02); 12 MONTHS \$55,400

WALKER, ELBERT A. ZABELIAN GROUPS (MATHEMATICAL SCIENCES) (MCS-8003060 A03); \$3,000

NEW YORK

BARUCH COLLEGE

SHEINGORN, MARK E. THE POINCARÉ THETA-OPERATOR (MATHEMATICAL SCIENCES) (MCS-8201765); 36 MONTHS \$32,300

BROOKLYN COLLEGE

STONE, DAVID A. BRANCHED COVERINGS OF SPHERES, AND CHARACTERISTIC CLASSES (MCS-7802147 A01); 24 MONTHS \$36,500

MATE, ATTILA; ORTHOGONAL POLYNOMIALS AND COMPUTATIONAL COMPLEXITY (MATHEMATICAL SCIENCES) (MCS-8100673 A01); 24 MONTHS \$23,795

CITY COLLEGE

GOLDFARB, DONALD; ALGORITHMS FOR NONLINEAR PROGRAMMING (MCS-8006065 A01); 24 MONTHS \$20,000

BAUMSLAG, GILBERT; FINITELY PRESENTED GROUPS (MCS-8103367 A01); 12 MONTHS \$22,840

COHN, HARVEY; MODULAR FUNCTIONS AND CLASS FIELD THEORY (MATHEMATICAL SCIENCES) (MCS-8201717); 12 MONTHS \$23,425

GOODMAN, JACOB E. THE GEOMETRY OF CONFIGURATIONS (MATHEMATICS) (MCS-8201831); 24 MONTHS \$41,900

BURR, STEFAN; GENERALIZED RAMSEY THEORY FOR GRAPHS (MATHEMATICAL SCIENCES) (MCS-8202055); 24 MONTHS \$36,850

CLARKSON COLLEGE OF TECHNOLOGY

GLASSER, M. LAWRENCE; ELLIPTIC INTEGRALS, LATTICE SUMS AND THEIR APPLICATIONS (MCS-8021280 A01); 12 MONTHS \$6,830

DUBINSKY, EDWARD; THE STRUCTURE OF NUCLEAR SPACES (MCS-8121538); 24 MONTHS \$30,000

ABLOWITZ, MARK J., FOKAS, ATHANASSI, AND KAUP, DAVID J. NON-LINEAR WAVE MOTION (MATHEMATICAL SCIENCES) (MCS-8202117); 12 MONTHS \$15,200

COLUMBIA UNIVERSITY

BEERS, LIPMAN, AND KURANISHI, MASATAKE; FUNCTIONS OF ONE AND SEVERAL COMPLEX VARIABLES (MATHEMATICS) (MCS-7827119 A03); 12 MONTHS \$106,400

JORGENSEN, TROELS; FUNCTIONS OF A COMPLEX VARIABLE (MCS-8101732 A01); 12 MONTHS \$18,520

JACQUET, HERVE; REPRESENTATION THEORY AND THE L-FUNCTION (MCS-8200551); 12 MONTHS \$28,350

PINKHAM, HENRY C. AND MOISHEZON, BORIS; BRAID GROUPS FOR ALGEBRAIC SURFACES; ALGEBRAIC DEFORMATION THEORY; AND ARITHMETIC OF AUTOMORPHIC FORMS (MATHEMATICAL SCIENCES) (MCS-8200777); 12 MONTHS \$59,450

BIRMAN, JOAN S. AND MORGAN, JOHN W. ALGEBRAIC AND GEOMETRIC TOPOLOGY (MATHEMATICS) (MCS-8201045); 12 MONTHS \$116,000

BOAS, HAROLD P. PROJECTIONS ONTO HOLOMORPHIC SPACES (MATHEMATICAL SCIENCES) (MCS-8201063); 24 MONTHS \$26,711

ROBBINS, HERBERT E. EMPIRICAL BAYES THEORY, SEQUENTIAL INFERENCE AND STOCHASTIC REGRESSION (MATHEMATICAL SCIENCES) (MCS-8201733); 12 MONTHS \$88,300

BASS, HYMAN, GALLAGHER, PATRICK, AND KOLCHIN, ELLIS R. REPRESENTATIONS OF DISCRETE GROUPS, AUTOMORPHISMS OF AFFINE SPACES, ANALYTIC NUMBER THEORY, AND DIFFERENTIAL ALGEBRAIC GROUPS (MATHEMATICAL SCIENCES) (MCS-8201833); 12 MONTHS \$101,300

CALLIAS, C. J. PARTIAL DIFFERENTIAL EQUATIONS WITH SINGULARITIES IN COEFFICIENTS AND APPLICATIONS TO EUCLIDEAN FIELD THEORY (MATHEMATICAL SCIENCES) (MCS-8203972); 24 MONTHS \$26,473

CORNELL UNIVERSITY

EARLE, CLIFFORD J. AND FUCHS, W. H. J. REAL & COMPLEX ANALYSIS (MCS-7800680 A06); 12 MONTHS \$34,689

PAYNE, LAWRENCE E. DIFFERENTIAL EQUATIONS AND THEIR APPLICATIONS (MCS-7919358 A02); 12 MONTHS \$34,850

HOLMES, PHILIP J. QUALITATIVE ANALYSIS OF DYNAMICAL PROBLEMS IN NONLINEAR MECHANICS (MEA-8017570 A01); 12 MONTHS \$11,000

ROSENBERG, ALEX, AND CHASE, STEPHEN U. ALGEBRA AND ALGEBRAIC NUMBER THEORY (MCS-8102144 A01); 12 MONTHS \$112,550

GROSS, LEONARD; ANALYSIS OF FERMION FIELDS (MCS-8102147 A01); 12 MONTHS \$18,650

BILLERA, LOUIS J. GAME THEORY AND COMBINATORIAL ASPECTS OF OPTIMIZATION (MCS-8102353 A02); 12 MONTHS \$28,050

BERSTEIN, ISRAEL, AND KAHN, PETER J. ALGEBRAIC AND GEOMETRIC TOPOLOGY (MATHEMATICS) (MCS-8201029); 12 MONTHS \$95,800

HAMILTON, RICHARD S. EVOLUTION EQUATIONS IN DIFFERENTIAL GEOMETRY (MATHEMATICAL SCIENCES) (MCS-8201360); 24 MONTHS \$30,900

DYNKIN, EUGENE B., KESTEN, HARRY, AND SPITZER, FRANK L. PROBABILITY THEORY (MCS-8202286); 12 MONTHS \$69,109

CORNELL UNIVERSITY-CORNELL UNIVERSITY - ENDOWED

BRAMBLE, JAMES H. NUMERICAL ANALYSIS DIFFERENTIAL EQUATIONS (MCS-7827003 A03); 12 MONTHS \$57,261

BRAMBLE, JAMES H. NUMERICAL ANALYSIS - DIFFERENTIAL EQUATIONS (MATHEMATICAL SCIENCES) (MCS-7827003 A04); \$15,000

CONNELLY, ROBERT; RIGIDITY OF CABLED FRAMEWORKS (MATHEMATICS) (MCS-7902521 A02); 24 MONTHS \$34,300

TODD, MICHAEL J. SPECIAL STRUCTURE IN SIMPLICIAL ALGORITHMS (MCS-7921979 A02); 12 MONTHS \$14,753

LEVIN, SIMON A. MATHEMATICAL THEORIES OF POPULATION DYNAMICS AND COMMUNITY STRUCTURE (MCS-8001618 A02); 12 MONTHS \$10,020

KNAPP, ANTHONY W. AND SPEH, BIRGIT; ANALYSIS ON SEMISIMPLE GROUPS (MCS-8001854 A04); 12 MONTHS \$25,800

KNAPP, ANTHONY W. AND SPEH, BIRGIT; ANALYSIS OF SEMISIMPLE GROUPS (MATHEMATICAL SCIENCES) (MCS-8001854 A05); \$12,000

STRICHARTZ, ROBERT S. HARMONIC ANALYSIS (MATHEMATICAL SCIENCES) (MCS-8002771 A01); 24 MONTHS \$32,477

NERODE, ANIL, AND MORLEY, MICHAEL D. MATHEMATICAL LOGIC (MCS-8003016 A02); 12 MONTHS \$64,000

TAYLOR, HOWARD M. THE RELIABILITY OF LOAD SHARING SYSTEMS (MCS-8114755); 12 MONTHS \$18,307

GELBART, STEPHEN; GROUP REPRESENTATIONS - AUTOMORPHIC FORMS AND L-FUNCTIONS (MCS-8116098); 12 MONTHS \$12,000

BROWN, LAWRENCE D. AND FARRELL, ROGER H. MATHEMATICAL STATISTICS (MCS-8200031); 12 MONTHS \$56,619

BROWN, LAWRENCE D. AND FARRELL, ROGER H. STATISTICAL DECISION THEORY (MATHEMATICAL SCIENCES) (MCS-8200031 A01); \$12,000

CUNY GRADUATE SCHOOL AND UNIVERSITY CENTER

CHAVEL, ISAAC, AND FELDMAN, EDGAR A.; ANALYSIS IN THE LARGE (MATHEMATICAL SCIENCES) (MCS-8102500 A01); 12 MONTHS \$39,600

AUSLANDER, LOUIS; HARMONIC ANALYSIS OF 2-STEP NILMANIFOLDS: THE DISCRETE FOURIER TRANSFORMS AND THEIR ALGORITHMS (MATHEMATICAL SCIENCES) (MCS-8201295); 12 MONTHS \$23,800

FORDHAM UNIVERSITY

JATEGAONKAR, ARUN V.; NON-COMMUTATIVE NOETHERIAN RINGS (MATHEMATICAL SCIENCES) (MCS-8003892 A01); 24 MONTHS \$29,000

MUELLER, JULIA H.; (I) RATIONAL APPROXIMATIONS TO CERTAIN ALGEBRAIC NUMBERS (II) ON RIEMANN'S ZETA FUNCTION - GAPS BETWEEN SIGN CHANGES OF $S(t)$ (MATHEMATICAL SCIENCES) (MCS-8205253); 24 MONTHS \$22,150

INDIVIDUAL AWARD

WHITE, BRIAN; MATHEMATICAL SCIENCES POSTDOCTORAL RESEARCH FELLOWSHIP (MCS-8114162 A01); 12 MONTHS \$22,000

GRAHAM, C. ROBIN; MATHEMATICAL SCIENCES POSTDOCTORAL RESEARCH FELLOWSHIP (MCS-8114177 A01); 12 MONTHS \$22,000

GLOVER, JOSEPH; MATHEMATICAL SCIENCES POSTDOCTORAL RESEARCH FELLOWSHIP (MCS-8211319); 24 MONTHS \$29,000

FOGELSON, AARON L.; MATHEMATICAL SCIENCES POSTDOCTORAL RESEARCH FELLOWSHIP (MCS-8211323); 24 MONTHS \$29,000

LEHMAN COLLEGE

LAZAROV, CONNOR; EXOTIC CLASSES, INDEX THEOREMS AND SPECTRAL INVARIANTS FOR FOLIATIONS (MATHEMATICS) (MCS-8201772); 24 MONTHS \$45,300

BERGER, CHARLES A.; OPERATOR THEORY AND COMPLEX VARIABLES (MATHEMATICAL SCIENCES) (MCS-8209966); 12 MONTHS \$18,704

NEW YORK UNIVERSITY

TRUBOWITZ, EUGENE, AND DEIFT, PERCY A.; VECTOR BUNDLES AND INTEGRABLE PARTICLE SYSTEMS ASSOCIATED WITH LINEAR ORDINARY DIFFERENTIAL OPERATORS AND APPLICATIONS TO NON-LINEAR WAVES (MCS-8002561 A02); 12 MONTHS \$22,000

VARADHAN, SRINIVASA S. AND DONSKER, MONROE; MARKOV PROCESSES (MCS-8002568 A02); 12 MONTHS \$54,646

CAPELL, SYLVAIN E.; TOPOLOGICAL AND RELATED STRUCTURES (MATHEMATICS) (MCS-8002925 A02); 12 MONTHS \$21,300

SPENCER, THOMAS; RIGOROUS ANALYSIS OF CRITICAL PHENOMENA (MATHEMATICS) (DMR-8100417 A01*); 12 MONTHS \$14,000

CAFFARELLI, LUIS; PROBLEMS IN THE THEORY OF PHASE CHANGES (MCS-8100802 A01); 12 MONTHS \$17,612

BERMAN, SIMON M.; FUNCTIONALS OF STOCHASTIC PROCESSES (MATHEMATICAL SCIENCES) (MCS-8201119); 12 MONTHS \$13,863

JOHN, FAITZ; MATHEMATICAL PHYSICS, NONLINEAR HYPERBOLIC EQUATIONS (MATHEMATICAL SCIENCES) (MCS-8201305); 12 MONTHS \$29,750

KOHN, ROBERT V.; RAPIDLY VARYING THIN STRUCTURES WITH APPLICATIONS TO STRUCTURAL DESIGN OPTIMIZATION (MATHEMATICAL SCIENCES) (MCS-8201308); 24 MONTHS \$25,450

POLLACK, RICHARD; THE GEOMETRY OF CONFIGURATIONS (MATHEMATICS) (MCS-8201342); 24 MONTHS \$27,100

DETURCK, DENNIS M.; PRESCRIBING RICCI CURVATURE AND RELATED GEOMETRIC PROBLEMS (MATHEMATICS) (MCS-8201463); 24 MONTHS \$20,600

NIRENBERG, LOUIS; DIFFERENTIAL EQUATIONS, PROBABILITY AND APPLICATIONS (MATHEMATICAL SCIENCES) (MCS-8201599); 12 MONTHS \$285,000

WIDLUND, OLOF; FAST METHODS FOR THE SOLUTION OF LARGE FINITE DIFFERENCE AND FINITE ELEMENT SYSTEMS OF EQUATIONS (MCS-8203236*); 12 MONTHS \$19,000

GLIMM, JAMES; FLUID MECHANICS AND STATISTICAL MECHANICS (MATHEMATICAL SCIENCES) (MCS-8207965); 12 MONTHS \$30,000

POLYTECHNIC INSTITUTE OF NEW YORK

HOCHSTADT, HARRY; INVERSE PROBLEMS FOR HILL'S EQUATION (MCS-8103373 A01); 12 MONTHS \$38,250

QUEENS COLLEGE

SHUB, MICHAEL, AND SULLIVAN, DENNIS P.; DYNAMICAL SYSTEMS AND TOPOLOGY (MATHEMATICAL SCIENCES) (MCS-8201267); 12 MONTHS \$58,500

SWICK, KENNETH E.; NONLINEAR AGE-DEPENDENT POPULATION DYNAMICS (MATHEMATICAL SCIENCES) (MCS-8301335); 12 MONTHS \$19,000

RENSSELAER POLYTECHNIC INSTITUTE

HOLMES, MARK H.; MATHEMATICAL PROBLEMS ARISING FROM HYDROELASTIC SYSTEMS (MCS-8102129 A01*); 12 MONTHS \$5,435

ISAACSON, DAVID; NUMERICAL ANALYSIS AND CRITICAL PHENOMENA (MCS-8102426 A01); 12 MONTHS \$15,100

SEGEL, LEE A. AND ODELL, GARRETT M.; THEORIES OF BIOLOGICAL MOTION AND PATTERN, AND THEIR CONTROL (MCS-8102640 A01*); 12 MONTHS \$27,000

DIPRIMA, RICHARD C.; NONLINEAR HYDRODYNAMIC STABILITY (MATHEMATICS) (MCS-8120839); 12 MONTHS \$12,000

DIPRIMA, RICHARD C. AND GARG, VIJAY K.; THE EFFECT OF HEATING AND COOLING ON LINEAR AND NONLINEAR GORTLER INSTABILITY ON CONCAVE SURFACES (MATHEMATICAL SCIENCES) (MCS-8201340*); 12 MONTHS \$8,725

MANITIUS, ANDRZEJ Z.; OPTIMAL CONTROL OF HEREDITARY SYSTEMS (MATHEMATICAL SCIENCES) (MCS-8201719*); 24 MONTHS \$35,000

ROYTBURD, VICTOR; STABILITY AND BIFURCATIONS OF FLAME FRONTS AND DETONATION WAVES (MATHEMATICAL SCIENCES) (MCS-8201721); 24 MONTHS \$28,350

ECKER, JOSEPH G.; MATHEMATICAL PROGRAMMING (MATHEMATICAL SCIENCES) (MCS-8201790); 12 MONTHS \$29,365

ROCKEFELLER UNIVERSITY

CASE, KENNETH M., COHEN, E. G. D. AND KAC, MARK; NONLINEAR PROBLEMS IN MATHEMATICAL PHYSICS (MCS-8017781 A01); 12 MONTHS \$66,459

STATE UNIVERSITY AT ALBANY

RANGE, R. MICHAEL; CAUCHY-RIEMANN EQUATIONS IN SEVERAL COMPLEX VARIABLES (MCS-8102216 A01); 12 MONTHS \$14,000

LANCE, TIMOTHY L.; EXPONENTIAL MAPS OF CLASSIFYING SPACES (MATHEMATICS) (MCS-8200505); 24 MONTHS \$25,200

KORENBLUM, BORIS; RIESZ MEASURES OF SUBHARMONIC FUNCTIONS WITH RESTRICTIONS ON GROWTH (MATHEMATICAL SCIENCES) (MCS-8201460); 12 MONTHS \$21,931

HABOUSH, WILLIAM J.; BRAUER GROUPS OF HOMOGENEOUS SPACES AND THE THEORY OF REPRESENTATIONS AND GROUP ACTIONS OVER FIELDS OF POSITIVE CHARACTERISTIC (MATHEMATICAL SCIENCES) (MCS-8202040); 12 MONTHS \$12,950

STATE UNIVERSITY AT BINGHAMTON

HANSON, DAVID L.; NON-STANDARD STOCHASTIC APPROXIMATION (MCS-8100740 A01); 12 MONTHS \$33,180

STATE UNIVERSITY AT BUFFALO

HASTINGS, STUART P.; SOME NONLINEAR DIFFERENTIAL EQUATIONS OF APPLIED MATHEMATICS (MCS-8101891 A01); 12 MONTHS \$20,300

ISBELL, JOHN R.; ALGEBRA AND TOPOS THEORY (MATHEMATICAL SCIENCES) (MCS-8102452 A01); 12 MONTHS \$60,800

KAZARINOFF, NICHOLAS D., MOLLENDORF, JOSEPH C. AND HASSARD, BRIAN D.; ANALYSIS OF MULTIPLE STEADY STATES IN NATURAL CONVECTION (MATHEMATICAL SCIENCES) (MCS-8104657 A01); 12 MONTHS \$23,000

COBURN, LEWIS A.; OPERATOR THEORY AND FUNCTIONAL ANALYSIS (MATHEMATICAL SCIENCES) (MCS-8201649); 12 MONTHS \$21,000

PIECH, M. ANN; ANALYSIS ON RIEMANNIAN WIENER MANIFOLDS (MATHEMATICAL SCIENCES) (MCS-8202319); 24 MONTHS \$38,200

KRAUS, JON; W*-DYNAMICAL SYSTEMS AND REFLEXIVE OPERATOR ALGEBRAS (MATHEMATICAL SCIENCES) (MCS-8202332); 24 MONTHS \$20,650

STATE UNIVERSITY AT STONY BROOK

SPENCER, JOEL; COMBINATORIAL ANALYSIS: PROBABILISTIC METHODS AND RAMSEY THEORY (MATHEMATICAL SCIENCES) (MCS-8001593 A02); 24 MONTHS \$33,200

DOUGLAS, RONALD G. AND PINCUS, JOEL D.; PURE & APPLIED OPERATOR THEORY (MCS-8102399 A01); 12 MONTHS \$75,100

KRA, IRWIN, MASKIT, BERNARD, AND LAUFER, HENRY; DEFORMATION OF COMPLEX STRUCTURES (MCS-8102621 A01); 12 MONTHS \$63,200

GROMOLL, DETLEF, AND CHEEGER, JEFF; DIFFERENTIAL GEOMETRY (MATHEMATICS) (MCS-8102758 A01); 12 MONTHS \$75,900

DOLEZAL, V. J.; NONCANONIC SYSTEMS OF NONLINEAR DIFFERENTIAL EQUATIONS (MATHEMATICAL SCIENCES) (MCS-8121475); 12 MONTHS \$19,650

TAYLOR, MICHAEL E.; LINEAR PARTIAL DIFFERENTIAL EQUATIONS (MATHEMATICS) (MCS-8201766); 12 MONTHS \$18,385

SAH, CHIH-HAN; THE SCISSORS CONGRUENCE PROBLEM (MATHEMATICAL SCIENCES) (MCS-8201833); 24 MONTHS \$40,500

MCDUFF, DUSA, AND JONES, LOWELL; TOPOLOGY AND MANIFOLDS (MATHEMATICS) (MCS-8203300); 12 MONTHS \$49,500

SYRACUSE UNIVERSITY

EDREI, ALBERT; THE THEORY OF ENTIRE AND MEROMORPHIC FUNCTIONS (MCS-8102123 A01); 12 MONTHS \$18,337

ANDERSON, DOUGLAS R.; SOME PROBLEMS IN FINITE TRANSFORMATION GROUPS (MATHEMATICS) (MCS-8201776); 12 MONTHS \$19,200

TRAVEL AWARD

MICHELLE, CHARLES; TRAVEL TO INTERNATIONAL MEETING ON COMPUTATIONAL ASPECTS OF COMPLEX ANALYSIS (MATHEMATICAL SCIENCES) BRAUNLAGE, WEST GERMANY - JULY 26, TO AUGUST 7, 1982 (MCS-8214321); 6 MONTHS \$749

UNIVERSITY OF ROCHESTER

MANDELBAUM, RICHARD; THE TOPOLOGICAL STRUCTURE OF COMPACT COMPLEX SURFACES (MATHEMATICS) (MCS-7905808 A01); 24 MONTHS \$32,400

HARPER, JOHN R. AND MANDELBAUM, RICHARD; CONFERENCE ON COMBINATORIAL METHODS IN TOPOLOGY AND ALGEBRAIC GEOMETRY: ROCHESTER, NEW YORK; JUNE 30-JULY 2, 1982 (MATHEMATICS) (MCS-8116754); 6 MONTHS \$10,000

YESHIVA UNIVERSITY

SCHECHTER, MARTIN; THEORY AND APPLICATIONS OF TWO SPACE SCATTERING (MATHEMATICAL SCIENCES) (MCS-8202181); 24 MONTHS \$45,000

EHRENPREIS, LEON; PARTIAL DIFFERENTIAL EQUATIONS AND GROUP REPRESENTATIONS (MATHEMATICAL SCIENCES) (MCS-8202193); 12 MONTHS \$25,971

NORTH CAROLINA

DEPARTMENT OF ARMY-U S ARMY RESEARCH OFFICE

DRESSSEL, FRANCIS G.; SYMPOSIA ON CURRENT DEVELOPMENTS IN APPLIED MATHEMATICS AT THE SIAM 1982 THIRTIETH ANNIVERSARY

MEETING; STANFORD UNIVERSITY; JULY 18-23, 1982 (MATHEMATICAL SCIENCES) (MCS-810772); 12 MONTHS \$8,196

DUKE UNIVERSITY

REED, MICHAEL C; PROPAGATION OF SINGULARITIES IN NONLINEAR WAVES (MATHEMATICAL SCIENCES) (MCS-8201258); 24 MONTHS \$34,122
SCHAEFFER, DAVID G; PERTURBED BIFURCATION AND SINGULARITY THEORY (MATHEMATICS) (MCS-8201297); 24 MONTHS \$42,400
PARDON, WILLIAM L; TOPOLOGY OF SINGULAR SPACES AND ALGEBRAIC PROPERTIES OF QUADRATIC FORMS (MATHEMATICS) (MCS-8202301); 24 MONTHS \$25,000

EAST CAROLINA UNIVERSITY

DEBNATH, LOKENATH; REGIONAL CONFERENCE ON NONLINEAR WAVES AND INTEGRABLE SYSTEMS; GREENVILLE, NORTH CAROLINA; JUNE 1-4, 1982 (MCS-8203607); 6 MONTHS \$17,484

UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL

STASHEFF, JAMES D; MATHEMATICAL SCIENCES: HOMOTOPY THEORY OF CLASSIFYING SPACES AND FIBRINGS (MCS-7903460 A03); 12 MONTHS \$23,700

PETERSEN, KARL E; CONVERGENCE AND CODING IN ERGODIC THEORY (MATHEMATICAL SCIENCES) (MCS-8001590 A01); 24 MONTHS \$32,200

MARCUS, BRIAN H; ERGODIC THEORY AND DYNAMICAL SYSTEMS (MCS-8001796 A02); 12 MONTHS \$11,960

KERZMAN, NORBERTO; PARTIAL DIFFERENTIAL EQUATIONS AND SINGULAR INTEGRAL METHODS IN SEVERAL COMPLEX VARIABLES (MATHEMATICS) (MCS-8001887 A01); 24 MONTHS \$30,966

NEWHOUSE, SHELDON E; DYNAMICAL SYSTEMS AND BIFURCATION THEORY (MATHEMATICS) (MCS-8001890 A03); 12 MONTHS \$23,000

SCHLESSINGER, MICHAEL; DEFORMATION THEORY (MATHEMATICAL SCIENCES) (MCS-8002378 A02); 12 MONTHS \$14,500

SIMONS, GORDON, AND RUPPERT, DAVID; MATHEMATICAL STATISTICS (MCS-8100748 A01); 12 MONTHS \$43,332

SIMONS, GORDON; SEQUENTIAL ANALYSIS (MATHEMATICAL SCIENCES) (MCS-8100748 A02); \$9,129

DAMON, JAMES N; TOPOLOGICAL TRIVIALITY OF UNFOLDINGS (MATHEMATICS) (MCS-8200166); 12 MONTHS \$13,200

BRYLAWSKI, THOMAS H; NUMERICAL INVARIANTS AND CHARACTERISTIC SETS FOR MATROIDS (MATHEMATICS: COMBINATORICS) (MCS-8201265); 24 MONTHS \$31,700

OHIO

OHIO STATE UNIVERSITY

JOHNSON, WILLIAM B; GEOMETRY OF BANACH SPACES (MCS-7903042 A04); 12 MONTHS \$45,466

JOHNSON, WILLIAM B; GEOMETRY OF BANACH SPACES (MCS-7903042 A05); \$4,514

RALLIS, STEPHEN J; LIFTING THEORY PROBLEMS ASSOCIATED TO DUAL REDUCTIVE PAIRS (MATHEMATICAL SCIENCES) (MCS-8002847 A01); 24 MONTHS \$23,600

ROSENBLATT, JOSEPH M; HARMONIC ANALYSIS, INVARIANT MEANS, RANDOM WALKS AND PHASE RETRIEVAL MATHEMATICS (MCS-8002981 A01); 24 MONTHS \$20,450

DEL JUNCO, ANDRES; ERGODIC THEORY AND FINITARY CODING (MATHEMATICAL SCIENCES) (MCS-8003038 A01); 24 MONTHS \$21,360

SUCHESTON, LOUIS; PROBABILITY AND ERGODIC THEORY (MCS-8003395 A02); 12 MONTHS \$19,100

RAY-CHAUDHURI, DIJEN K; COMBINATORIAL PROBLEMS AND THEIR APPLICATIONS (MCS-8102456 A01); 12 MONTHS \$21,450

FRIEDMAN, HARVEY M, AND SMITH, RICK L; THE NECESSARY USE OF ABSTRACT SET THEORY, AND CONSTRUCTIVE ASPECTS OF ALGEBRA (MATHEMATICS) (MCS-8102661 A01); 12 MONTHS \$26,500

BURGHELEA, DAN, AND NEISENDORFER, JOSEPH A; GEOMETRIC TOPOLOGY AND HOMOTOPY THEORY (MATHEMATICS) (MCS-8102686 A01); 12 MONTHS \$27,700

DAVIS, WILLIAM J; THE BANACH-MAZUR DISTANCE: PROJECTION CONSTANTS (MATHEMATICAL SCIENCES) (MCS-8102714 A01); 12 MONTHS \$23,500

FALKNER, NEIL; PROBABILISTIC POTENTIAL THEORY (MATHEMATICAL SCIENCES) (MCS-8103473 A01); 24 MONTHS \$17,357

SOLOMON, RONALD M; A UNIFIED TREATMENT OF RANK 3 SIMPLE GROUPS (MATHEMATICS) (MCS-8201823); 24 MONTHS \$24,050

PARSON, L ALAYNE; BOUNDING THE NORM OF THE POINCARÉ THETA OPERATOR (MATHEMATICAL SCIENCES) (MCS-8202025); 24 MONTHS \$19,909

HSIA, JOHN S; ARITHMETIC THEORY OF INTEGRAL QUADRATIC FORMS (MATHEMATICAL SCIENCES) (MCS-8202065); 24 MONTHS \$29,100

SHAPIRO, DANIEL B; SUM-OF-SQUARES IDENTITIES (MATHEMATICAL SCIENCES) (MCS-8202156); 24 MONTHS \$20,600

ERCOLANI, NICHOLAS, AND FOREST, GREGORY; APPLICATIONS OF ALGEBRAIC GEOMETRY TO QUASI-PERIODIC SOLTON THEORY (MATHEMATICAL SCIENCES) (MCS-8202383); 24 MONTHS \$26,350

OHIO UNIVERSITY

VAN DOUWEN, ERIC K; GENERAL TOPOLOGY: REMAINDERS, PRODUCTS AND BEYOND (MATHEMATICS) (MCS-8003619 A01); 24 MONTHS \$28,700

UNIVERSITY OF CINCINNATI

MEYER, KENNETH R; DIFFERENTIAL EQUATIONS AND THEIR APPLICATIONS (MCS-8001851 A02); 12 MONTHS \$56,072

MINDA, C DAVID; AN ANALOG OF EXTREMAL LENGTH (MATHEMATICAL SCIENCES) (MCS-8201131); 12 MONTHS \$12,743

OKLAHOMA

OKLAHOMA STATE UNIVERSITY

ALSPACH, DALE E; COMPLEMENTED SUBSPACES OF CLASSICAL BANACH SPACES (MCS-8002510 A01); 24 MONTHS \$20,800

MYERS, JOHN R; TOPOLOGY OF 3-MANIFOLDS (MATHEMATICS) (MCS-8002524 A01); 24 MONTHS \$20,900

JACO, WILLIAM H; LOW-DIMENSIONAL MANIFOLDS THEORY (MATHEMATICS) (MCS-8211923); 24 MONTHS \$33,900

UNIVERSITY OF OKLAHOMA NORMAN CAMPUS

MCDONALD, BERNARD R; GEOMETRIC ALGEBRA AND QUADRATIC FORMS OVER RINGS WITH MANY UNITS (MCS-8023735 A01); \$1,900

MAGID, ANDY R; DISCRETE SUBGROUPS OF ALGEBRAIC GROUPS (MATHEMATICAL SCIENCES) (MCS-8200504); 24 MONTHS \$33,300

RESCO, RICHARD; DIMENSION PROBLEMS FOR NOETHERIAN RINGS (MCS-8201593); 24 MONTHS \$20,600

OREGON

OREGON STATE UNIVERSITY

BRUNK, H D; BAYES-ORIENTED MULTIVARIATE STUDIES (MATHEMATICAL SCIENCES) (MCS-8002907 A01); 24 MONTHS \$42,521

SMITH, KENNAN T; MATHEMATICAL ASPECTS OF DIVERGENT BEAM RADIOGRAPHY (MCS-8101586 A01*); 12 MONTHS \$20,400

UNIVERSITY OF OREGON - EUGENE

KANTOR, WILLIAM M; PERMUTATION GROUPS (MCS-7903130 A03); 12 MONTHS \$15,200

SEITZ, GARY M; FINITE GROUP THEORY AND REPRESENTATION THEORY (MATHEMATICS) (MCS-8100795 A01); 12 MONTHS \$34,650

ANDREWS, FRED C; NONPARAMETRIC REGRESSION ESTIMATION (MATHEMATICAL SCIENCES) (MCS-8201541); 12 MONTHS \$9,116

ANDREWS, FRED C; REGIONAL CONFERENCE ON SECOND ORDER ASYMPTOTICS IN STATISTICS, EUGENE, OREGON; JULY 19-24, 1982 (MCS-8203736); 6 MONTHS \$16,689

PENNSYLVANIA

BRYN MAWR COLLEGE

HUGHES, RHONDA J; SINGULAR PERTURBATIONS (MATHEMATICAL PHYSICS) (MCS-8202194); 24 MONTHS \$25,150

MELVIN, PAUL; TRANSFORMATION GROUPS ON 3 AND 4-MANIFOLDS (MATHEMATICS) (MCS-8205450*); 12 MONTHS \$11,516

CARNEGIE-MELLON UNIVERSITY

MACCAMY, RICHARD C; DIFFERENTIAL AND INTEGRAL EQUATIONS FOR HEREDITARY SYSTEMS (MCS-8001944 A02); 12 MONTHS \$23,050

COFFMAN, CHARLES V, AND MIZEL, VICTOR J; ANALYSIS AND CONTINUUM MECHANICS (MATHEMATICAL SCIENCES) (MCS-8002851 A02); 12 MONTHS \$37,850

GURTIN, MORTON E, AND WILLIAMS, WILLIAM O; MODELING IN CONTINUUM MECHANICS AND POPULATION BIOLOGY (MCS-8102830 A01); 12 MONTHS \$44,128

NOLL, WALTER; MATHEMATICAL FOUNDATIONS OF PHYSICS (MCS-8102826 A01); 12 MONTHS \$19,830

SCHAEFFER, JUAN J; FUNCTIONAL DIFFERENTIAL EQUATIONS (MATHEMATICAL SCIENCES) (MCS-8200894); 24 MONTHS \$46,700

SHREVE, STEVEN E, AND LEHOCZKY, JOHN P; OPTIMAL CONTROL THEORY FOR AN ECONOMICS MODEL WITH DEGENERATE DIFFUSIONS (MATHEMATICAL SCIENCES) (MCS-8202210); 12 MONTHS \$15,900

COLEMAN, BERNARD D, AND OWEN, DAVID R; NON-LINEAR CONTINUUM MECHANICS (MATHEMATICS) (MCS-8202647); 12 MONTHS \$40,300

BALAS, EGON; STRUCTURAL PROPERTIES OF COMBINATORIAL OPTIMIZATION PROBLEMS AND INTEGER PROGRAMMING (OPERATIONS RESEARCH) (MCS-8205425*); 12 MONTHS \$23,050

INDIVIDUAL AWARD

HARBATER, DAVID; MATHEMATICAL SCIENCES POSTDOCTORAL RESEARCH FELLOWSHIP (MCS-8211317); 24 MONTHS \$29,000

LEHIGH UNIVERSITY

DAVIS, DONALD M; MATHEMATICAL SCIENCES: HOMOTOPY-THEORETIC PROPERTIES OF PROJECTIVE SPACES (MCS-7902953 A02); \$2,000

RIVLIN, RONALD S; STUDIES IN NON-LINEAR CONTINUUM PHYSICS (MCS-8028567 A01*); 12 MONTHS \$16,000

PENNSYLVANIA STATE UNIVERSITY

STAFFELDT, ROSS E; ALGEBRAIC K-THEORY OF TOPOLOGICAL SPACES (MATHEMATICS) (MCS-8002596 A01); 24 MONTHS \$24,800

VASERSTEIN, LEONID; CLASSICAL GROUPS OVER RINGS (MCS-8002801 A02); 12 MONTHS \$16,000

HERMAN, RICHARD H, AND ANDERSON, JOEL H; BANACH *-ALGEBRAS AND ALGEBRAS OF OPERATORS (MCS-8002802 A02); 12 MONTHS \$40,500

LINDSAY, BRUCE G; ESTIMATING MIXING DISTRIBUTIONS IN STATISTICAL MODELS (MCS-8003081 A01); 24 MONTHS \$23,532

ARNOLD, STEVEN F; A CONTINUED STUDY OF PROCEDURES FOR ANALYZING EXPERIMENTS WITH REPEATED MEASURES (MCS-8004454 A01); 24 MONTHS \$28,000

JECH, THOMAS J, AND MITCHELL, WILLIAM J; SET THEORY: LARGE CARDINAL NUMBERS, INNER MODELS, AND RELATED TOPICS (MATHEMATICS) (MCS-8020467 A02); 12 MONTHS \$37,000

HAGER, WILLIAM W, CHEN, GOONG, AND MILLS, WENDELL H; CONTROL SYSTEMS GOVERNED BY PARTIAL DIFFERENTIAL EQUATIONS (MCS-8101892 A01); 12 MONTHS \$39,500

LI, WEN-CHING W. AND BRESSOUD, DAVID M.; ANALYTIC, ALGEBRAIC AND COMBINATORIAL NUMBER THEORY (MCS-8101943 A01); 12 MONTHS \$24,900

WATERHOUSE, WILLIAM C. AND WEISFEILER, BORIS; ALGEBRAIC GROUPS (MCS-8102697 A01); 12 MONTHS \$33,000

SIMPSON, STEPHEN; MATHEMATICAL LOGIC (MCS-8107867 A01); 12 MONTHS \$19,500

ANDREWS, GEORGE E. AND BROWNAWELL, W DALE; ADDITIVE AND TRANSCENDENTAL NUMBER THEORY (MATHEMATICAL SCIENCES) (MCS-8201733); 12 MONTHS \$38,300

SOCIETY FOR INDUSTRIAL AND APPLIED MATH (SIAM)

BLOCK, I EDWARD; CONFERENCE ON APPLIED LINEAR ALGEBRA; RA-LEIGH, NORTH CAROLINA; APRIL 26-29, 1982 (29S-8116849*); 3 MONTHS \$8,000

TEMPLE UNIVERSITY

NEWMAN, DONALD J.; RATIONAL APPROXIMATION (MCS-7802171 A04); 12 MONTHS \$20,586

KNOPP, MARVIN I.; MODULAR AND AUTOMORPHIC FORMS (MATH-EMATICAL SCIENCES) (MCS-8202032); 24 MONTHS \$33,008

UNIVERSITY OF PENNSYLVANIA

KADISON, RICHARD V.; FUNCTIONAL ANALYSIS AND MATHEMATICAL PHYSICS (MCS-8002991 A02); 12 MONTHS \$79,600

KADISON, RICHARD V.; FUNCTIONAL ANALYSIS AND MATHEMATICAL PHYSICS (MCS-8002991 A03); \$16,500

FREYD, PETER J.; FINITE NUMERALS, REAL NUMERALS AND ORDINALS IN A TOPOS; SCORING METHODS ON A TOPOS (MATHEMATICAL SCIENCES) (MCS-8003111 A01); 24 MONTHS \$23,400

CALABI, EUGENIO, AND GLUCK, HERMAN R.; DIFFERENTIAL STRUCTURES (MCS-8102554 A01); \$24,100

CALABI, EUGENIO, AND GLUCK, HERMAN R.; DIFFERENTIAL STRUCTURES (MATHEMATICS) (MCS-8102554 A02); 12 MONTHS \$67,000

SHALE, DAVID; MATHEMATICAL STRUCTURES AT THE FOUNDATIONS OF QUANTUM THEORY (MCS-8102632 A01); 12 MONTHS \$20,000

DUTTA, SANKAR P.; INTERSECTION MULTIPLICITY (MATHEMATICS; COMMUTATIVE ALGEBRA) (MCS-8201136); 24 MONTHS \$24,800

KAZDAN, JERRY L. AND WARNER, FRANK W.; APPLICATIONS OF DIFFERENTIAL EQUATIONS TO DIFFERENTIAL GEOMETRY (MATHEMATICS) (MCS-8201140); 12 MONTHS \$40,200

KUBERT, DANIEL; MODULAR FUNCTIONS AND JACOBI-SUM HECKE CHARACTERS (MATHEMATICAL SCIENCES) (MCS-8203620); 12 MONTHS \$15,300

UNIVERSITY OF PITTSBURGH

FLEISSNER, WILLIAM G.; SET THEORY IN TOPOLOGY (MATHEMATICS) (MCS-7901848 A01); 24 MONTHS \$25,800

HANGES, NICHOLAS; ANALYTIC PARTIAL DIFFERENTIAL OPERATORS (MCS-8100505 A01); 12 MONTHS \$10,622

LAU, KA SING; WIENER'S GENERALIZED HARMONIC ANALYSIS (MATHEMATICAL SCIENCES) (MCS-8203328); 24 MONTHS \$25,450

RHODE ISLAND

AMERICAN MATHEMATICAL SOCIETY

LEVEQUE, WILLIAM J.; RESEARCH EXPOSITORY ARTICLES IN MATHEMATICS (MCS-7821334 A03); 12 MONTHS \$12,000

LEVEQUE, WILLIAM J. AND WELLS, R O; AMS SERIES OF SHORT SUMMER CONFERENCES: PHASE II (MATHEMATICAL SCIENCES) (MCS-7924296 A01); 12 MONTHS \$165,824

LEVEQUE, WILLIAM J.; SYMPOSIUM ON SEVERAL COMPLEX VARIABLES; MADISON, WISCONSIN; APRIL 12-15, 1982 (MATHEMATICS) (MCS-8112446); 12 MONTHS \$18,300

LEVEQUE, WILLIAM J.; 1982 SYMPOSIUM ON SOME MATHEMATICAL QUESTIONS IN BIOLOGY; WASHINGTON, D. C.; JANUARY 3-8, 1982 (MCS-8114615); 3 MONTHS \$5,884

LEVEQUE, WILLIAM J.; ADMINISTRATION OF NSF POSTDOCTORAL RESEARCH FELLOWSHIP PROGRAM, 1981-82 (MCS-8119929); 12 MONTHS \$16,715

LEVEQUE, WILLIAM J.; 1982 SUMMER INSTITUTE ON RECURSION THEORY; ITHACA, NEW YORK; JUNE 28-JULY 16, 1982 (MATHEMATICAL SCIENCES) (MCS-8120074); 6 MONTHS \$98,100

LEVEQUE, WILLIAM J. AND SALLY, PAUL J.; SUMMER SEMINAR ON APPLICATIONS OF GROUP THEORY IN PHYSICS AND MATHEMATICAL PHYSICS; CHICAGO, ILLINOIS; JULY 6-16, 1982 (MATHEMATICAL SCIENCES) (MCS-8208734*); 12 MONTHS \$20,000

BROWN UNIVERSITY

KUSHNER, HAROLD J.; RESEARCH ON STOCHASTIC SYSTEMS AND STABILITY THEORY AND APPLICATIONS (MCS-7712946 A04*); 12 MONTHS \$32,000

BANCHOFF, THOMAS F.; COMPUTER GRAPHICS-AIDED STUDY IN GEOMETRY (MATHEMATICS) (MCS-8085770 A01); 12 MONTHS \$27,800

FULTON, WILLIAM, AND HARRIS, JOSEPH; ALGEBRAIC GEOMETRY (MATHEMATICAL SCIENCES) (MCS-8103400 A01); 12 MONTHS \$42,900

HOFFSTEIN, JEFFREY; APPLICATIONS OF EISENSTEIN SERIES TO L-SERIES AND ZETA FUNCTIONS (MATHEMATICAL SCIENCES) (MCS-810414 A01); 24 MONTHS \$26,800

ROSEN, MICHAEL I.; ARITHMETIC OF GLOBAL FUNCTION FIELDS (MCS-8103460); 24 MONTHS \$40,000

FLEMING, WENDELL H.; GROUP TRAVEL FOR U. S. PARTICIPANTS IN AN INT'L CONFERENCE ON RECENT ADVANCES IN FILTERING AND OPTIMIZATION, COCOYOC, MEXICO, FEBRUARY 1-7, 1982 (MCS-8117150); 6 MONTHS \$2,900

SIROVICH, LAWRENCE; ASYMPTOTIC TECHNIQUES FOR PROBLEMS IN VISION (MCS-8121414*); 12 MONTHS \$24,150

STRAUSS, WALTER A.; SCATTERING THEORY OF LINEAR AND NON-LINEAR WAVES (MATHEMATICAL SCIENCES) (MCS-8121487); 12 MONTHS \$24,000

FLEMING, WENDELL H.; RESEARCH ON OPTIMAL STOCHASTIC CONTROL AND RELATED TOPICS IN APPLIED PROBABILITY (MCS-8121940*); 12 MONTHS \$22,000

BAUM, PAUL F., MAC PHERSON, ROBERT D. AND HARRIS, BRUNO; ANALYTICAL AND TOPOLOGICAL K-THEORY; RIEMANN SURFACES, HARMONIC VOLUME, AND HARMONIC MAPS; AND INTERSECTION HO- MOLOGY THEORY (MATHEMATICS) (MCS-8202334); 12 MONTHS \$78,000

COLE, BRIAN J.; FUNCTIONAL ALGEBRAS (MATHEMATICAL SCIENCES) (MCS-8202548); 12 MONTHS \$51,000

PIPKIN, ALLEN C.; DEFORMATION AND FRACTURE OF FIBER REIN- FORCED MATERIALS (MATHEMATICAL SCIENCES) (MCS-8202574); 24 MONTHS \$62,700

BANKS, H T, DAFERMOS, C M. AND HALE, JACK K.; NONLINEAR DYN- AMICAL SYSTEMS (MATHEMATICAL SCIENCES) (MCS-8205355); 12 MONTHS \$92,450

SOUTH CAROLINA

UNIVERSITY OF SOUTH CAROLINA AT COLUMBIA

DEVORE, RONALD A.; MATHEMATICAL APPROXIMATION THEORY (MCS-8101661 A01); 12 MONTHS \$15,548

MARKHAM, THOMAS L.; SPECIAL MATRICES (MCS-8102114 A01); 12 MONTHS \$24,200

BENNETT, COLIN, AND SHARPLEY, ROBERT C.; OPERATORS AND SPACES OF FUNCTIONS (MCS-8102194 A01); 12 MONTHS \$22,350

GRIGGS, JERROLD R. AND TROTTER, WILLIAM T.; COMBINATORIAL ANALYSIS: PARTIALLY ORDERED SETS, GRAPH THEORY, RAMSEY THEORY, ALGORITHMS, AND RECURSIVE COMBINATORICS (MATH- EMATICAL SCIENCES) (MCS-8202172); 24 MONTHS \$52,500

KUSTIN, ANDREW R.; MATHEMATICAL SCIENCES: THE STRUCTURE OF CODIMENSION FOUR GORENSTEIN IDEALS (MCS-8210951); 24 MONTHS \$17,100

TENNESSEE

MEMPHIS STATE UNIVERSITY

TAN, WAI-YUAN; MATHEMATICAL THEORY AND STATISTICAL ANAL- YSIS OF ASSAYS TO DETERMINE GENETIC CHANGES (STATISTICS) (MCS-8111937); 12 MONTHS \$15,701

UNIVERSITY OF TENNESSEE AT KNOXVILLE

MILLER, MATTHEW; RESOLUTIONS OF GORENSTEIN IDEALS (MATH- EMATICS; COMMUTATIVE ALGEBRA) (MCS-8101710 A01); 24 MONTHS \$19,200

WALSH, JOHN J.; CELL-LIKE MAPPINGS, AR-MAPPINGS, AND CHARAC- TERIZING INFINITE DIMENSIONAL MANIFOLDS (MATHEMATICS) (MCS- 8200913); 24 MONTHS \$24,100

ELLNER, STEPHEN; MODELS OF PLANT SPECIES IN VARYING ENVI- RONMENTS (MATHEMATICAL SCIENCES) (MCS-8201682); 24 MONTHS \$9,850

TEXAS

RICE UNIVERSITY

WHEELER, MARY F.; APPLICATION OF FINITE ELEMENT AND FINITE DIFFERENCE METHODS TO RESERVOIR ENGINEERING PROBLEMS (MATHEMATICAL SCIENCES) (MCS-8003025 A01); 24 MONTHS \$33,360

BRYANT, ROBERT L.; DIFFERENTIAL GEOMETRY AND OVERDETER- MINED SYSTEMS OF PARTIAL DIFFERENTIAL EQUATIONS (MATH- EMATICAL SCIENCES) (MCS-8003237 A01); 24 MONTHS \$24,800

HARVEY, F REESE, AND POLKING, JOHN C.; COMPLEX ANALYSIS (MATHEMATICAL SCIENCES) (MCS-8104235 A01); 12 MONTHS \$70,967

WELLS, R O; COMPLEX DIFFERENTIAL GEOMETRY AND MATHEMAT- ICAL PHYSICS (MCS-8104237 A01*); 12 MONTHS \$20,803

CURTIS, MORTON L.; LOW-DIMENSIONAL TOPOLOGY AND GROUPS (MATHEMATICS) (MCS-8104244 A01); 12 MONTHS \$25,500

SOUTHERN METHODIST UNIVERSITY

DANIEL, PATRICIA; PARAMETER ESTIMATION AND CONTROL IN NONLINEAR NONAUTONOMOUS DISTRIBUTED SYSTEMS (MATHEMAT- ICAL SCIENCES) (MCS-8200883); 24 MONTHS \$20,950

TEXAS A & M UNIVERSITY

GELLER, SUSAN C.; LOWER K-THEORY AND AN ALGORITHM FOR A FINITE PROJECTIVE PLANE OF ORDER 15 (MATHEMATICAL SCIENCES) (MCS-8200564); 24 MONTHS \$22,500

LEWIS, DANIEL R. AND TOMCZAK-JAEGERM, NICOLE; GEOMETRY AND NUMERICAL CHARACTERISTICS OF BANACH SPACES (MATH- EMATICS) (MCS-8301044); 12 MONTHS \$24,100

BAKELMAN, ILYA; BOUNDARY VALUE PROBLEMS FOR GENERAL N- DIMENSIONAL ELLIPTIC MONGE-AMPERE AND QUASILINEAR EQUATIONS (MATHEMATICAL SCIENCES) (MCS-8301106); 24 MONTHS \$32,242

MARCUS, MICHAEL B.; TOPICS IN PROBABILITY AND ANALYSIS (MCS- 8201268); 12 MONTHS \$17,100

PITTS, JON T.; THE INDEX OF INSTABILITY OF MINIMAL SURFACES AND BOUNDARY REGULARITY FOR MINIMAL SURFACES ARISING FROM VARIATIONAL METHODS IN THE LARGE (MATHEMATICS) (MCS- 8202221); 24 MONTHS \$30,000

ZINN, JOEL; LIMIT THEOREMS FOR BANACH SPACE VALUED AND REAL VALUED RANDOM VARIABLES (MATHEMATICAL SCIENCES) (MCS-8213743); 12 MONTHS \$14,115

TEXAS TECH UNIVERSITY

HARRIS, GARY A; GEOMETRY AND ANALYSIS FOR PROBLEMS IN PARTIAL DIFFERENTIAL EQUATIONS (MATHEMATICAL SCIENCES) (MCS-8201489; 24 MONTHS \$18,777

UNIV OF TEXAS AT AUSTIN

YOUNG, DAVID M, AND KINCAID, DAVID R; RESEARCH AND DEVELOPMENT OF ITERATIVE ALGORITHM AND SOFTWARE FOR ELLIPTIC PARTIAL DIFFERENTIAL EQUATIONS (MCS-7919829 A02*; 12 MONTHS \$16,543

BICHTLER, KLAUS, AND MUELLER, CARL; NUMERICAL ANALYSIS IN STOCHASTIC ANALYSIS (MATHEMATICAL SCIENCES) (MCS-8001779 A01; 24 MONTHS \$52,650

MILLER, ARNOLD W; SET THEORETIC TECHNIQUES OF FORCING (MATHEMATICS) (MCS-8001883 A01; 24 MONTHS \$22,000

ROSENTHAL, HASKELL P; FUNCTIONAL ANALYSIS: ISOMORPHIC THEORY OF BANACH SPACES (MCS-8002393 A01; 12 MONTHS \$29,000

SCHULTER, WILLIAM F; AFFINE RINGS SATISFYING A POLYNOMIAL IDENTITY (MCS-8003113 A02; 12 MONTHS \$13,500

LORENTZ, GEORGE G; FUNCTIONAL ANALYSIS, APPROXIMATION AND INTERPOLATION (MATHEMATICAL SCIENCES) (MCS-8102698 A01; 12 MONTHS \$15,000

MORRIS, CARL N; THEORY AND APPLICATION OF PARAMETRIC EMPIRICAL BAYES ESTIMATION (MCS-8104250 A01; 12 MONTHS \$26,500

BING, R H, AND EATON, WILLIAM T; MANIFOLDS WITH LOW DIMENSIONS (MATHEMATICS) (MCS-8104255 A01; 12 MONTHS \$52,500

VELLEMAN, DANIEL J; MORASSES WITH DIAGONALIZABLE LIMITS AND FORCING (MATHEMATICS) (MCS-8201324; 12 MONTHS \$8,400

ODELL, EDWARD; APPLICATIONS OF REAL ANALYSIS TO A BANACH SPACE PROBLEM (MCS-8201635; 24 MONTHS \$23,400

WEISSLER, FREDERIC B; SEMIGROUPS OF OPERATORS: HYPERCONTRACTIVE ESTIMATES AND NONLINEAR PERTURBATIONS (MCS-8201639; 24 MONTHS \$22,150

GORDON, CAMERON M; LOW-DIMENSIONAL MANIFOLDS AND KNOT THEORY (MATHEMATICS) (MCS-8201643; 24 MONTHS \$30,100

CASSON, ANDREW J; COBORDISM OF KNOTS AND HOMOLOGY 3-SPHERES (MATHEMATICS) (MCS-8202155; 24 MONTHS \$32,800

GILBERT, JOHN E, AND TOMAS, PETER; FOURIER ANALYSIS AND HP THEORY (MATHEMATICAL SCIENCES) (MCS-8202165; 12 MONTHS \$38,776

VALLER, JEFFREY, GRAHAM, SIDNEY W, AND KOLESNIK, GRIGORI; SUMMER CONFERENCE ON ANALYTIC NUMBER THEORY; AUSTIN, TEXAS; JUNE 1 - JULY 9, 1982 (MATHEMATICAL SCIENCES) (MCS-8204205; 12 MONTHS \$8,000

UNIV OF TEXAS AT DALLAS

KIMELDORF, GEORGE; MONOTONE CORRELATION AND POSITIVE DEPENDENCE (MCS-8102564 A01; 12 MONTHS \$15,840

PANG, JONG-SHI; LARGE-SCALE AND GENERALIZED COMPLEMENTARY SYSTEMS (ECS-8114571 A01*; 12 MONTHS \$6,500

UNIVERSITY OF HOUSTON CENTRAL CAMPUS

AUCHMUTY, J F; VARIATIONAL METHODS AND APPLICATIONS IN ASTROPHYSICS AND FLUID MECHANICS (MATHEMATICAL SCIENCES) (MCS-8201889; 24 MONTHS \$28,000

UTAH

INDIVIDUAL AWARD

HOSTE, JIM E; MATHEMATICAL SCIENCES POSTDOCTORAL RESEARCH FELLOWSHIP (MCS-8211316; 24 MONTHS \$29,000

UNIVERSITY OF UTAH

STERN, RONALD J; $Z/2$ HOMOLOGY 3-SPHERES AND THE 4-MANIFOLDS THEY BOUND (MATHEMATICS) (MCS-8002843 A01; 24 MONTHS \$31,000

HOPPENSTEADT, FRANK C; MATHEMATICAL METHODS FOR BIOLOGICAL RHYTHMS AND POPULATION GENETICS (MCS-8015359 A01; 12 MONTHS \$31,567

DONAGI, RON; MODULI PROBLEMS IN ALGEBRAIC GEOMETRY (MATHEMATICAL SCIENCES) (MCS-8102643 A01; 24 MONTHS \$29,400

CARLSON, JAMES A, AND TOLEDO, DOMINGO; ALGEBRAIC GEOMETRY: HODGE THEORY AND COHERENT SHEAVES (MCS-8102745 A01; 12 MONTHS \$28,000

CLEMENS, C H; COMPLEX GEOMETRY (MCS-8103384 A01; 12 MONTHS \$4,350

ROSSI, HUGO; REPRESENTATION THEORY OF LIE GROUPS AND COMPLEX GEOMETRY (MCS-8104269 A01; 12 MONTHS \$51,500

TROMBI, PETER C; CONFERENCE ON REPRESENTATION THEORY OF SEMI-SIMPLE LIE GROUPS; PARK CITY, UTAH; APRIL 14-30, 1982 (MATHEMATICS) (MCS-8115492; 6 MONTHS \$17,000

SCHMITT, KLAUS; A CLASS OF SYSTEMS OF NONLINEAR DIFFERENTIAL EQUATIONS (MATHEMATICAL SCIENCES) (MCS-8121951; 12 MONTHS \$18,689

GOODEARL, KENNETH R; VON NEUMANN REGULAR RINGS AND DIFFERENTIAL OPERATOR RINGS (MATHEMATICAL SCIENCES) (MCS-8206839; 24 MONTHS \$29,400

TAYLOR, JOSEPH L; HARMONIC ANALYSIS ON SEMISIMPLE LIE GROUPS (MATHEMATICAL SCIENCES) (MCS-8201511; 12 MONTHS \$47,850

MIHALIK, MICHAEL L; THE STRONG ENDS OF A GROUP (MATHEMATICS) (MCS-8202645; 12 MONTHS \$10,200

CRAUDER, BRUCE C; BIRATIONAL ALGEBRAIC GEOMETRY (MATHEMATICAL SCIENCES) (MCS-8203664; 24 MONTHS \$21,000

VIRGINIA

INDIVIDUAL AWARD

AGLER, JIM; MATHEMATICAL SCIENCES POSTDOCTORAL RESEARCH FELLOWSHIP (MCS-8211331; 24 MONTHS \$29,000

UNIVERSITY OF VIRGINIA

STONG, ROBERT E, AND GIFFEN, CHARLES H; DIFFERENTIAL COBORDISM AND RELATED TOPICS (MATHEMATICS) (MCS-8101890 A01; 12 MONTHS \$37,600

ROSENBLUM, MARVIN; OPERATOR THEORY AND ANALYSIS (MCS-8102518 A01; 12 MONTHS \$50,900

MCCRIMMON, KEVIN M, WARD, HAROLD N, AND SCOTT, LEONARD L; GROUP THEORY AND JORDAN ALGEBRAS (MATHEMATICAL SCIENCES) (MCS-8202103; 12 MONTHS \$75,100

HOWLAND, JAMES S, AND PITT, LOREN D; QUANTUM MECHANICS AND RANDOM FIELDS (MCS-8202115; 12 MONTHS \$52,400

VIRGINIA POLYTECHNIC INSTITUTE

FARKAS, DANIEL, GREEN, EDWARD L, AND SNIDER, ROBERT L; REPRESENTATIONS OF GROUPS AND ALGEBRAS (MCS-8001543 A02; 12 MONTHS \$32,600

HANNSGEN, KENNETH B, AND WHEELER, ROBERT L; VOLTERRA INTEGRAL EQUATIONS (MCS-8101618 A01; 12 MONTHS \$24,799

BALL, JOSEPH A, OLIN, ROBERT F, AND THOMSON, JAMES E; SUBNORMAL OPERATORS AND MODEL THEORY (MCS-8101678 A01; 12 MONTHS \$32,250

BURNS, JOHN A, AND CLIFF, EUGENE M; COMPUTATIONAL METHODS FOR IDENTIFICATION AND OPTIMAL CONTROL OF HEREDITARY SYSTEMS (ECS-8109245*); 12 MONTHS \$18,385

QUINN, FRANK S; SURGERY ON ENDS OF MAPS, AND ALGEBRAIC K-THEORY (MATHEMATICS) (MCS-8201621; 24 MONTHS \$32,000

MITTAL, YASHASWIN D; MULTIDIMENSIONAL DATA ANALYSIS: PROJECTION PURSUIT, CHANGE POINT AND SPACINGS (MATHEMATICAL SCIENCES) (MCS-8205853; 24 MONTHS \$26,000

WATSON, LAYNE T; MATHEMATICAL SOFTWARE FOR HOMOTOPY ALGORITHMS (MCS-8207217*); 24 MONTHS \$6,500

WASHINGTON

UNIVERSITY OF WASHINGTON

GRUNBAUM, BRANKO; COMBINATORIAL GEOMETRY (MATHEMATICS) (MCS-8001570 A02; 12 MONTHS \$27,300

PERLMAN, MICHAEL D; MULTIVARIATE STATISTICAL ANALYSIS (MCS-8002167 A03; 12 MONTHS \$21,748

KOBLITZ, NEAL I; P-ADIC SPECIAL FUNCTIONS (MATHEMATICAL SCIENCES) (MCS-8002271 A01; 24 MONTHS \$22,450

OSBORNE, M SCOTT, AND WARNER, GARTH W; EISENSTEIN SERIES (MCS-8002324 A02; 12 MONTHS \$35,950

HEWITT, EDWIN; INVESTIGATIONS IN FUNCTIONAL ANALYSIS (MATHEMATICAL SCIENCES) (MCS-8003329 A01; 24 MONTHS \$18,500

MILLER, HAYNES R; COMPLEX COBORDISM AND INFINITE LOOP SPACE THEORY (MATHEMATICS) (MCS-8002780 A02; 12 MONTHS \$14,600

GANGOLLI, RAMESH A; ANALYSIS AND PROBABILITY THEORY (MCS-8003618 A02; 12 MONTHS \$20,000

STOUT, EDGAR L; STUDIES IN COMPLEX ANALYSIS (MCS-8100763 A01; 12 MONTHS \$21,935

SHORACK, GALEN R; EMPIRICAL PROCESSES, WITH APPLICATION TO STATISTICS (MCS-8102568 A01; 12 MONTHS \$16,016

FOLLAND, GERALD B; HARMONIC ANALYSIS AND DIFFERENTIAL EQUATIONS (MCS-8103382 A01; 12 MONTHS \$15,318

IRVING, RONALD S; REPRESENTATION THEORY OF ALGEBRAS (MCS-8105320; 14 MONTHS \$11,500

KLEE, VICTOR L; CONVEXITY, COMPLEXITY AND COMBINATORICS (MCS-8116069*); 12 MONTHS \$17,650

MARSHALL, DONALD E; INNER FUNCTIONS (MATHEMATICAL SCIENCES) (MCS-8121561; 24 MONTHS \$18,428

KOTTWITZ, ROBERT E; ORBITAL INTEGRALS AND SHIMURA VARIETIES (MATHEMATICAL SCIENCES) (MCS-8200785; 24 MONTHS \$19,450

RAVENEL, DOUGLAS C; HOMOTOPY THEORY AND COMPLEX COBORDISM (MATHEMATICS) (MCS-8201296; 24 MONTHS \$37,800

ERICKSON, K B; DIFFUSIONS, RANDOM WALKS AND BRANCHING PROCESSES (MATHEMATICAL SCIENCES) (MCS-8301470; 24 MONTHS \$15,638

LIND, DOUGLAS A; ERGODIC THEORY AND DYNAMICS (MCS-8201543; 24 MONTHS \$24,100

CHINBURG, TED; GAUSS SUMS, L-FUNCTIONS, GALOIS MODULES AND SALEM NUMBERS (MATHEMATICAL SCIENCES) (MCS-8201608; 12 MONTHS \$5,100

HAIN, RICHARD M; MIXED HODGE STRUCTURES ON THE RATIONAL HOMOTOPY GROUPS OF AN ALGEBRAIC VARIETY (MATHEMATICS) (MCS-8201642; 24 MONTHS \$17,900

KUHN, NICHOLAS J; SPACELIKE RESOLUTIONS OF SPECTRA (MATHEMATICS) (MCS-8201652; 24 MONTHS \$8,600

GLICKSBERG, IRVING; HARMONIC ANALYSIS AND BANACH ALGEBRAS (MCS-8201729; 12 MONTHS \$24,300

WARFIELD, ROBERT B; STRUCTURE OF RINGS AND MODULES (MATHEMATICAL SCIENCES) (MCS-8202219; 12 MONTHS \$20,650

PYKE, RONALD; STOCHASTIC PROCESSES AND RELATED PROBLEMS IN STATISTICAL INFERENCE (MATHEMATICAL SCIENCES) (MCS-8202861; 12 MONTHS \$27,871

WISCONSIN

INDIVIDUAL AWARD

BECKER, HOWARD S; MATHEMATICAL SCIENCES POSTDOCTORAL RESEARCH FELLOWSHIP (MCS-8211328); 24 MONTHS \$29,000

MARQUETTE UNIVERSITY

JONES, PETER R; FREE PRODUCTS OF INVERSE SEMIGROUPS (MATHEMATICAL SCIENCES) (MCS-8201023); 24 MONTHS \$19,500

UNIVERSITY OF WISCONSIN-MADISON

NOHEL, JOHN A; POSTDOCTORAL INTERDISCIPLINARY RESEARCH IN THE MATHEMATICAL SCIENCES (MCS-7927062 A02); 12 MONTHS \$150,000

LEVIN, JACOB J; NONLINEAR INTEGRAL AND DELAY EQUATIONS (MCS-8001524 A02); 12 MONTHS \$18,467

KUELBS, JAMES; PROBABILITY MEASURES ON VECTOR SPACES: BASIC RESULTS AND APPLICATIONS (MCS-8001596 A04); 12 MONTHS \$15,676

KUELBS, JAMES; PROBABILITY MEASURES ON VECTOR SPACES (MCS-8001596 A05); \$10,800

CONLEY, CHARLES C; GLOBAL AND ASYMPTOTIC PROBLEMS IN DIFFERENTIAL EQUATIONS (MCS-8001816 A02); 12 MONTHS \$18,100

MEYER, RICHARD E, AND SHEN, MEI-CHANG; DEVELOPMENT AND APPLICATION OF MATHEMATICAL METHODS FOR THE SCIENCES (MCS-8001960 A02); 12 MONTHS \$65,000

MEYER, RICHARD E; MATHEMATICAL SCIENCES: DEVELOPMENT AND APPLICATION OF MATHEMATICAL METHODS FOR THE SCIENCES (MCS-8001960 A03); \$7,950

WAINGER, STEPHEN; SINGULAR INTEGRALS AND AVERAGES OF FUNCTIONS (MCS-8002178 A02); 12 MONTHS \$17,633

SOLOMON, LOUIS; GROUP THEORY (MCS-8002773 A02); 12 MONTHS \$47,650

CRANDALL, MICHAEL G; NONLINEAR EVOLUTION EQUATIONS (MATHEMATICAL SCIENCES) (MCS-8002946 A01); 24 MONTHS \$23,850

BRUALDI, RICHARD, AND SCHNEIDER, HANS; MATRIX AND COMBINATORIAL THEORY (MCS-8026132 A01); 12 MONTHS \$53,250

GRIFFEATH, DAVID S; INTERACTING PARTICLE SYSTEMS AND PERCOLATION PROCESSES (MCS-8100256 A01); 12 MONTHS \$10,063

RUDIN, WALTER; COMPLEX ANALYSIS IN ONE AND SEVERAL VARIABLES (MCS-8100782 A01); 12 MONTHS \$72,990

NEY, PETER E, AND KURTZ, THOMAS G; STOCHASTIC MODELS FOR THE GROWTH AND MOVEMENT OF POPULATIONS (MCS-8101536 A01); 12 MONTHS \$32,713

ASKEY, RICHARD A; SPECIAL FUNCTIONS AND APPROXIMATIONS (MCS-8101568 A01); 12 MONTHS \$16,695

BATES, DOUGLAS M; EXTENSIONS OF NONLINEARITY MEASURES IN REGRESSION TO STATISTICAL CURVATURE (MATHEMATICAL SCIENCES) (MCS-8102732 A01); 24 MONTHS \$23,786

RABINOWITZ, PAUL H; NONLINEAR DIFFERENTIAL EQUATIONS (MCS-8110556 A01); 12 MONTHS \$18,061

RATCLIFFE, JOHN G; GROUP-THEORETICAL INVESTIGATIONS IN LOW-DIMENSIONAL TOPOLOGY (MATHEMATICS) (MCS-8121392); 12 MONTHS \$10,400

ORLIK, PETER P; THE TOPOGRAPHY OF REFLECTION GROUPS (MATHEMATICS) (MCS-8121942); 24 MONTHS \$31,700

TURNER, ROBERT E L; NONLINEAR PARTIAL DIFFERENTIAL EQUATIONS ARISING IN HYDRODYNAMICS (MATHEMATICAL SCIENCES) (MCS-8200406); 24 MONTHS \$31,200

FADELL, EDWARD R, AND HUSSEINI, SUFIAN Y; INDEX THEORIES FOR G-SPACES AND FIXED POINTS (MATHEMATICAL SCIENCES) (MCS-8200685); 24 MONTHS \$70,500

HELLERSTEIN, SIMON; ASYMPTOTIC PROBLEMS IN FUNCTION THEORY AND INTEGRODIFFERENTIAL EQUATIONS (MATHEMATICAL SCIENCES) (MCS-8200728); 12 MONTHS \$31,370

KEISLER, H. JEROME; MATHEMATICAL LOGIC AND ITS APPLICATIONS (MCS-8200729); 12 MONTHS \$89,700

DE BOOR, CARL; STABILITY OF LINEAR SPLINE APPROXIMATION SCHEMES (MATHEMATICAL SCIENCES) (MCS-8200763); 24 MONTHS \$10,000

OSBORN, J MARSHAL, AND BENKART, GEORGIA M; SIMPLE LIE ALGEBRAS OF PRIME CHARACTERISTIC AND LIE-ADMISSIBLE ALGEBRAS (MATHEMATICAL SCIENCES) (MCS-8200885); 12 MONTHS \$28,600

JOHNSON, RICHARD A; INFERENCE IN TIME SERIES AND OTHER STOCHASTIC PROCESSES (MATHEMATICAL SCIENCES) (MCS-8202205); 24 MONTHS \$18,000

COX, DENNIS D; LIMIT THEOREMS FOR NONPARAMETRIC ESTIMATES (MATHEMATICAL SCIENCES) (MCS-8202560); 24 MONTHS \$14,678

ROTHSCHILD, LINDA P; EXISTENCE, SMOOTHNESS AND ANALYTICITY OF SOLUTIONS FOR A CLASS OF LINEAR PARTIAL DIFFERENTIAL EQUATIONS (MATHEMATICS) (MCS-8203349); 24 MONTHS \$25,953

BUCK, R C; APPROXIMATION THEORY FOR FUNCTIONS OF SEVERAL VARIABLES (MATHEMATICS) (MCS-8205494); 24 MONTHS \$25,139

UNIVERSITY OF WISCONSIN-MILWAUKEE

O'HALLORAN, JOYCE; MATHEMATICAL SCIENCES: COHOMOLOGY OF ALGEBRAIC GROUPS AND LIE ALGEBRAS (MCS-8214009); 12 MONTHS \$10,000

WYOMING

UNIVERSITY OF WYOMING

GROSS, KENNETH I; RESEARCH IN HARMONIC ANALYSIS (MCS-8121150); 12 MONTHS \$15,108

PHYSICS

ALABAMA

UNIVERSITY OF ALABAMA IN HUNTSVILLE

GREGORY, J C; JAPANESE-AMERICAN COOPERATIVE EXPERIMENT TO STUDY THE NUCLEAR INTERACTIONS, CHARGE COMPOSITION AND ENERGY SPECTRA OF COSMIC RAYS AT ENERGIES UP TO 10.14 EV (PHY-8006334 A02); 12 MONTHS \$25,755

ARIZONA

UNIVERSITY OF ARIZONA

WING, WILLIAM H; MODERN SPECTROSCOPY AND COLLISION STUDIES OF FUNDAMENTAL ATOMIC AND MOLECULAR SYSTEMS (PHY-7915302 A02); 12 MONTHS \$161,000

KOHLER, HIGURD S, AND BARRETT, BRUCE R; NUCLEAR THEORY (PHY-8100141 A01); 12 MONTHS \$60,795

HOPF, FREDERIC A; STUDIES OF INSTABILITIES AND CHAOTIC BEHAVIOR IN OPTICAL BISTABILITY (PHYSICS) (PHY-8104982 A01); 12 MONTHS \$71,500

GARCIA, J D; TIME-DEPENDENT HARTREE-FOCK THEORY FOR ATOMIC COLLISIONS (PHYSICS) (PHY-8207073); 12 MONTHS \$39,000

BOWEN, THEODORE; COSMIC RAY RESEARCH AND DETECTOR DEVELOPMENT (PHY-8207697); 12 MONTHS \$93,000

COON, SIDNEY A; THEORETICAL NUCLEAR PHYSICS (PHY-8208044); 24 MONTHS \$47,000

CALIFORNIA

CALIFORNIA INSTITUTE OF TECHNOLOGY

DREVER, RONALD W; INVESTIGATIONS IN EXPERIMENTAL GRAVITY AND GRAVITATIONAL RADIATION (PHY-7912305 A04); \$119,993

BARNES, CHARLES A, AND KOONIN, STEVEN E; NUCLEAR PHYSICS AND ITS APPLICATION TO ASTROPHYSICS, GEOPHYSICS AND TECHNOLOGY (PHY-7923628 A06); \$120,000

TOMBRELLO, THOMAS A; NUCLEAR PHYSICS AND ITS APPLICATION TO ASTROPHYSICS, GEOPHYSICS AND TECHNOLOGY (PHY-7923638 A04); 12 MONTHS \$1,200,000

MERCEREAU, JAMES E; APPLICATIONS OF RF MICROWAVE SUPERCONDUCTIVITY TO PARTICLE ACCELERATORS (PHYSICS) (PHY-8015508 A01); 12 MONTHS \$100,000

SIMON, BARRY M; MATHEMATICAL ATOMIC PHYSICS (MCS-8120833*); 12 MONTHS \$20,000

DREVER, RONALD W, AND WHITCOMB, STANLEY E; INVESTIGATIONS IN EXPERIMENTAL GRAVITY AND GRAVITATIONAL RADIATION (PHYSICS) (PHY-8204056); 12 MONTHS \$481,304

KOONIN, STEVEN E; RESEARCH IN THEORETICAL NUCLEAR PHYSICS (PHY-8207332); 12 MONTHS \$81,303

CALIFORNIA STATE UNIVERSITY, LOS ANGELES

EPSTEIN, MARTIN B, AND MARGAZIOTIS, D J; PROTON INDUCED REACTIONS ON HELIUM 3 AND OXYGEN 16 AT INTERMEDIATE ENERGIES (PHY-7925221 A02); 12 MONTHS \$65,000

JET PROPULSION LABORATORY

CHUTJIAN, ARA; THE MEASUREMENTS OF ELECTRON ATTACHMENT CROSS SECTIONS IN THE ENERGY RANGE 0-200 MILLIELECTRON VOLTS AT HIGH ELECTRON ENERGY RESOLUTION (PHYSICS) (PHY-8200608); 12 MONTHS \$28,900

LAWRENCE BERKELEY LABORATORY

KELLY, ROBERT L; BERKELEY PARTICLE DATA CENTER (PHY-8022590 A01); 12 MONTHS \$43,900

SRI INTERNATIONAL

GALLAGHER, THOMAS F; RYDBERG STATES OF ALKALINE EARTH ATOMS (PHYSICS) (PHY-8007041 A02); 12 MONTHS \$67,900

GILLEN, KEITH T, AND COGGIOLA, MICHAEL J; COLLISION PROCESSES INVOLVING EXCITED ATOMS (PHYSICS) (PHY-8111590 A01); 12 MONTHS \$105,987

PETERSON, JAMES R; PROPERTIES OF METASTABLE NEGATIVE IONS (PHYSICS) (PHY-8111913 A01); 12 MONTHS \$88,330

HELM, HANSPETER; HALF-COLLISIONS OF MOLECULAR IONS (PHYSICS) (PHY-8112548 A01); 12 MONTHS \$90,610

GALLAGHER, THOMAS F; MOLECULAR PHYSICS LABORATORY MULTUSER COMPUTER SYSTEM (PHY-8114611); 18 MONTHS \$90,000

SLANGER, TOM G; REACTION DYNAMICS OF OXYGEN IN THE SINGLET D EXCITED STATE (PHY-8115563); 12 MONTHS \$93,066

STANFORD UNIVERSITY

SUSSKIND, LEONARD; RESEARCH IN THEORETICAL ELEMENTARY PARTICLE PHYSICS (PHY-7836347 A02); 12 MONTHS \$125,006

WOJCICKI, STANLEY G; HIGH ENERGY PHYSICS (PHY-7912259 A02); 12 MONTHS \$383,000

WOJCICKI, STANLEY G; HIGH ENERGY PHYSICS (PHY-7912259 A03); \$11,760

SCHAWLOW, ARTHUR L, AND HANSCH, THEODOR W; STUDIES IN SPECTROSCOPY AND QUANTUM ELECTRONICS (PHY-8010639 A02); 12 MONTHS \$309,000

SCHAWLOW, ARTHUR L, AND HANSCH, THEODOR W; STUDIES IN SPECTROSCOPY AND QUANTUM ELECTRONICS (PHYSICS) (PHY-8010639 A04); \$23,856

FAIRBANK, WILLIAM M; SEARCH FOR GRAVITATIONAL RADIATION USING LOW TEMPERATURE TECHNIQUES (PHY-8014184 A02); 12 MONTHS \$300,000

FAIRBANK, WILLIAM M; PROGRAM TO SEARCH FOR GRAVITATIONAL RADIATION USING LOW TEMPERATURE TECHNIQUES (PHY-8014184 A03); \$51,998

MEYERHOF, WALTER E; HIGH-ENERGY ATOMIC PHYSICS (PHY-8015348 A01); 12 MONTHS \$170,000

MEYERHOF, WALTER E; HIGH-ENERGY ATOMIC PHYSICS (PHY-8015348 A02); \$40,000

EVERITT, CHARLES W, AND CABRERA, BLAS; PRECISE DETERMINATIONS OF H/M IN ROTATING SUPERCONDUCTING RINGS (DMR-8026007 A01); 12 MONTHS \$70,000

HOFSTADTER, ROBERT; HIGH ENERGY PHYSICS PROGRAM (PHY-8107396 A01); 12 MONTHS \$452,500

HOFSTADTER, ROBERT; STUDY OF RARE MUON DECAYS (INTERMEDIATE ENERGY PHYSICS) (PHY-8115559 A01); 12 MONTHS \$141,576

WAGONER, ROBERT V; THEORETICAL STUDIES IN GRAVITATION AND ASTROPHYSICS (PHY-8118387); 12 MONTHS \$67,877

HANNA, STANLEY S; RESEARCH IN NUCLEAR SCIENCES (PHYSICS) (PHY-8201181); 12 MONTHS \$230,000

ZARE, RICHARD N; ALIGNMENT AND ORIENTATION IN PHOTOFRACTIONATION PROCESSES (PHYSICS) (PHY-8206100); 12 MONTHS \$60,000

FAIRBANK, WILLIAM M; SEARCH FOR FRACTIONAL CHARGE USING LOW TEMPERATURE TECHNIQUES (PHYSICS) (PHY-8206791); 12 MONTHS \$155,000

LOEW, GREGORY A; 1982 SUMMER WORKSHOP ON HIGH ENERGY PARTICLE ACCELERATORS; STANFORD, CALIFORNIA; AUGUST 2-13, 1982 (PHY-8211385); 6 MONTHS \$8,000

UNIVERSITY OF CALIFORNIA, BERKELEY

SACHS, RAINER K; GENERAL RELATIVITY AND COSMOLOGY (PHY-7913146 A03); \$9,901

SMOOT, GEORGE F; SPECTRUM OF THE COSMIC MICROWAVE BACKGROUND RADIATION (PHY-8015694 A01); 12 MONTHS \$25,200

SMOOT, GEORGE F; SPECTRUM OF THE COSMIC MICROWAVE BACKGROUND RADIATION (ASTROPHYSICS) (PHY-8015694 A02); \$12,500

PRICE, P B; SEARCH FOR HIGHLY CHARGED PARTICLES (PHY-8024128 A02); 12 MONTHS \$60,000

PRICE, P B; SEARCH FOR HIGHLY CHARGED PARTICLES (PHY-8024128 A03); \$9,586

BINGHAM, HARRY H; HIGH ENERGY PARTICLE PHYSICS (PHY-8106766 A01); 12 MONTHS \$297,756

FELDMAN, JACOB; TOPICS IN ANALYSIS, PROBABILITY AND MATHEMATICAL PHYSICS (MCS-8107086 A01); 12 MONTHS \$21,000

KNIGHT, WALTER D; METAL MICROCLUSTERS IN BEAMS (DMR-8115540); 12 MONTHS \$14,500

MANDELSTAM, STANLEY; PHYSICS: THEORY OF ELEMENTARY PARTICLES (PHY-8118547); 12 MONTHS \$155,912

MANDELSTAM, STANLEY; PHYSICS: THEORY OF ELEMENTARY PARTICLES (PHY-8118547 A01); \$17,030

GAILLARD, MARY K; PHYSICS: THEORY OF ELEMENTARY PARTICLES (PHY-8205424); 24 MONTHS \$102,037

UNIVERSITY OF CALIFORNIA, DAVIS

ROMERO, JUAN L; EXPERIMENTAL NUCLEAR PHYSICS (PHY-8121003); 12 MONTHS \$145,525

ROMERO, JUAN L; EXPERIMENTAL NUCLEAR PHYSICS (PHY-8121003 A01); \$15,844

UNIVERSITY OF CALIFORNIA, IRVINE

CHEN, HERBERT H, AND REINES, FREDERICK; NEUTRINO ELECTRON ELASTIC SCATTERING AT THE CLINTON P. ANDERSON MESON FACILITY AT LOS ALAMOS (PHY-7523206 A06); \$50,000

SHAW, GORDON L, BANDER, MYRON, AND SILVERMAN, DENNIS J; THEORETICAL STUDIES IN HIGH ENERGY PHYSICS (PHY-7910262 A02); 12 MONTHS \$84,019

RYNN, NATHAN, AND BOEHMER, HEINRICH; BASIC RESEARCH IN PLASMA PHYSICS (PHY-8009800 A03); 12 MONTHS \$213,224

NEWMAN, RILEY D; DEVELOPMENT OF CRYOGENIC TORSION BALANCES (PHYSICS) (PHY-8112993 A01); 12 MONTHS \$68,600

CHEN, HERBERT H; NEUTRINO PHYSICS EXPERIMENTS AT THE LOS ALAMOS MASON PHYSICS FACILITY (PHY-8205709); 12 MONTHS \$364,787

SHAW, GORDON L; EIGHTH IRVINE CONFERENCE ON HIGH ENERGY PHYSICS; IRVINE, CALIFORNIA; DECEMBER 4-5, 1982 (PHY-8211384); 6 MONTHS \$4,120

UNIVERSITY OF CALIFORNIA, LOS ANGELES

SCHLEIN, PETER E; PP AND PP HADRON PHYSICS AT THE CERN INTERSECTING STORAGE RINGS (PHY-7924766 A04); 12 MONTHS \$345,015

CORNWALL, JOHN M; THEORETICAL HIGH ENERGY PHYSICS (PHY-8020144 A02); 12 MONTHS \$194,530

DAWSON, JOHN M, AND LIN, ANTHONY T; COMPUTER SIMULATION OF PLASMAS AT UCLA (PHYSICS) (PHY-8026048 A01); 12 MONTHS \$116,000

WONG, ALFRED Y, AND DIMONTE, GUY; PHYSICS OF ENERGETIC PLASMA: STUDIES OF CONFINEMENT AND TURBULENCE (PHY-8204363); 9 MONTHS \$180,000

WONG, ALFRED Y, AND DIMONTE, GUY; PHYSICS OF ENERGETIC PLASMA: STUDIES OF CONFINEMENT AND TURBULENCE (PHY-8204363 A01); \$38,000

MOSZKOWSKI, STEVEN A, AND WONG, CHUN W; THEORETICAL NUCLEAR PHYSICS (PHY-8204399); 12 MONTHS \$100,000

STENZEL, REINER L; PLASMAS WITH RANDOM MAGNETIC FIELDS (PHYSICS) (PHY-8209524); 12 MONTHS \$94,000

UNIVERSITY OF CALIFORNIA, SAN DIEGO-REVELLE COLLEGE

MALMBERG, JOHN H; FUNDAMENTAL PROCESSES IN PLASMAS (PHYSICS) (PHY-8009326 A02); 12 MONTHS \$315,000

UNIVERSITY OF CALIFORNIA, SAN DIEGO

MASEK, GEORGE E; HIGH ENERGY PHYSICS RESEARCH (PHY-7923770 A03); 12 MONTHS \$303,000

GOODKIND, JOHN M; TEST OF GRAVITATIONAL INVERSE SQUARE LAW BETWEEN FORTY-FIVE CENTIMETERS AND 1 METER (PHY-8008166 A01); 6 MONTHS \$7,192

SWANSON, ROBERT A; EXPERIMENTAL RESEARCH IN THE PHYSICS OF ELEMENTARY PARTICLES (PHY-8014185 A04); \$18,500

SWANSON, ROBERT A; EXPERIMENTAL RESEARCH IN THE PHYSICS OF ELEMENTARY PARTICLES (PHY-8014185 A05); \$108,843

SWANSON, ROBERT A; EXPERIMENTAL RESEARCH IN THE PHYSICS OF ELEMENTARY PARTICLES (PHY-8205900); 12 MONTHS \$171,000

UNIVERSITY OF CALIFORNIA, SANTA BARBARA

KOHN, WALTER, SUGAR, ROBERT L, HARTLE, JAMES B, SAWYER, RAYMOND F, AND SCALAPINO, DOUGLAS J; INSTITUTE FOR THEORETICAL PHYSICS (PHY-7727084 A03); 12 MONTHS \$990,000

SAWYER, RAYMOND F, AND WILCZEK, FRANK; PROBLEMS IN THEORETICAL PHYSICS (PHY-8018938 A02); \$32,793

HARTLE, JAMES B; RESEARCH IN GENERAL RELATIVITY AND RELATIVISTIC ASTROPHYSICS (PHY-8107384 A01); 12 MONTHS \$41,106

UNIVERSITY OF CALIFORNIA, SANTA CRUZ

NAUENBERG, MICHAEL, BROWER, RICHARD C, PRIMACK, JOEL R, AND RUDNICK, JOSEPH; THEORY OF PARTICLE PHYSICS AND PHASE TRANSITION (PHY-8115541); 12 MONTHS \$72,000

NAUENBERG, MICHAEL, BROWER, RICHARD C, PRIMACK, JOEL R, AND RUDNICK, JOSEPH; THEORY OF PARTICLE PHYSICS AND PHASE TRANSITION (PHY-8115541 A01); \$10,000

UNIVERSITY OF SOUTHERN CALIFORNIA

CHANG, TU-NAN; THEORY OF STRONG CONFIGURATION INTERACTION IN ATOMIC TRANSITION (PHY-8009146 A01); 12 MONTHS \$35,000

LAMBROPOULOS, P; NEW EFFECTS IN MULTIPHOTON ATOMIC AND MOLECULAR PROCESSES (PHY-8100251 A01); 12 MONTHS \$59,000

COOKE, WILLIAM E; STUDIES OF AUTOIONIZING STATES OF ALKALINE EARTH ATOMS (PHY-8201688); 12 MONTHS \$66,000

COLORADO

ASPEN CENTER FOR PHYSICS

ABRAHAMS, ELIHU, CRONIN, JAMES W, ANDERSON, PHILIP W, AND CARRUTHERS, PETER A; SUMMER WORKSHOP ON CRITICAL PROBLEMS IN PHYSICS AND ASTROPHYSICS (PHY-8107358 A01); 12 MONTHS \$86,000

COLORADO STATE UNIVERSITY

FAIRBANK, WILLIAM M; A SPECTROSCOPIC SEARCH FOR QUARKS (PHYSICS) (PHY-8106763 A01); 12 MONTHS \$54,885

UNIVERSITY OF COLORADO AT BOULDER

NARCROSS, DAVID, COOPER, JOHN, AND LINEBERGER, W CARL; RESEARCH IN ATOMIC AND MOLECULAR PHYSICS AND RELATED AREAS AT THE JOINT INSTITUTE FOR LABORATORY PHYSICS (PHY-8200805); 12 MONTHS \$870,000

NARCROSS, DAVID, COOPER, JOHN, AND LINEBERGER, W CARL; RESEARCH IN ATOMIC AND MOLECULAR PHYSICS AND RELATED AREAS AT THE JOINT INSTITUTE FOR LABORATORY ASTROPHYSICS (PHY-8200805 A01); \$79,468

CONNECTICUT

FAIRFIELD UNIVERSITY

HADJIMICHAEL, EVANGELOS; TOPICS IN INTERMEDIATE ENERGY PHYSICS: NUCLEON STRUCTURE AND NUCLEAR FORCES (PHY-8009144 A01); 24 MONTHS \$32,000

UNIVERSITY OF CONNECTICUT

KESSEL, QUENTIN; INNER-SHELL EXCITATIONS IN HEAVY ION-ATOM COLLISIONS (PHYSICS) (PHY-8106915 A01); 12 MONTHS \$76,172

YALE UNIVERSITY

HERZENBERG, ARVID, HYMAN, HOWARD; INDUSTRY-UNIVERSITY CO-OPERATIVE RESEARCH ACTIVITY: THEORETICAL INVESTIGATION OF ELECTRON IMPACT EXCITATION PROCESSES (PHY-8005467 A03); 12 MONTHS \$11,707

LICHTEN, WILLIAM; LASER SPECTROSCOPY OF BASIC ATOMS (PHY-8020465 A01); 12 MONTHS \$79,231

CALDWELL, C D; EXCITED-STATE ION PRODUCTION AND ANGULAR DISTRIBUTIONS IN PHOTOIONIZATION (PHYSICS) (PHY-8021282 A01); 12 MONTHS \$76,220

KOCH, PETER M; PRECISE SPECTROSCOPIC STUDIES AND COLLISION PROCESSES IN AN INTENSE ELECTRIC FIELD (PHY-8026548 A01); 8 MONTHS \$70,000

MOHR, PETER J; QUANTUM ELECTRODYNAMICS OF SIMPLE ATOMIC SYSTEMS (PHY-8026549 A01); 12 MONTHS \$30,000

HUGHES, VERNON W, AND HINDS, EDWARD A; FUNDAMENTAL STUDIES IN ATOMIC PHYSICS (PHY-8105035 A01); \$15,000

HUGHES, VERNON W, AND EGAN, PATRICK O; DOPPLER-FREE TWO-PHOTON LASER SPECTROSCOPY OF POSITRONIUM (PHY-8108680 A01); 12 MONTHS \$70,000

HINDS, EDWARD A, AND HUGHES, VERNON W; MEASUREMENTS OF PARITY NONCONSERVATION IN HYDROGEN AND DEUTERIUM USING MICROWAVE TRANSITIONS IN THE 2S STATE (PHY-8120541); 12 MONTHS \$125,000

DETWEILER, STEVEN L, AND MONCRIEF, VINCENT; RELATIVISTIC ASTROPHYSICS AND GRAVITATION PHYSICS (PHY-8204953); 12 MONTHS \$36,000

HERZENBERG, ARVID; CALCULATIONS ON ELECTRON-MOLECULE INTERACTIONS (PHYSICS) (PHY-8207706); 12 MONTHS \$34,933

DELAWARE

FRANKLIN INSTITUTE-BARTOL RESEARCH FOUNDATION

GAISSER, THOMAS K; RESEARCH ORIENTED WORKSHOP ON PHYSICS WITH LARGE EMULSION CHAMBERS AND RELATED SYSTEMS; LA PAZ, BOLIVIA; JULY 19-23, 1982 (INT-8203048*); 6 MONTHS \$2,800

STEIGMAN, GARY; TWENTY-FIRST ANNUAL EASTERN THEORETICAL PHYSICS CONFERENCE, NEWARK, DELAWARE; OCTOBER 8-9, 1982 (PHY-8208977); 12 MONTHS \$5,000

GAISSER, THOMAS K; SIMULATIONS TO INTERPRET COSMIC RAY PHYSICS EXPERIMENTAL RESULTS (PHY-8210459); 12 MONTHS \$55,734

UNIVERSITY OF DELAWARE

HALPRIN, ARTHUR; LEWES CENTER FOR PHYSICS (PHY-8120080); 12 MONTHS \$5,000

DISTRICT OF COLUMBIA

AMERICAN UNIVERSITY

ARNOLD, RAYMOND G; MEASUREMENT OF THE ELASTIC ELECTRON-PROTON CROSS SECTION AT LARGE MOMENTUM TRANSFER (PHY-8108484 A02); 12 MONTHS \$309,635

CATHOLIC UNIVERSITY OF AMERICA

CRANNELL, HALL L, FAGG, L W, AND SOBER, DANIEL I; NUCLEAR STRUCTURE WITH INTERMEDIATE ENERGY ELECTRONS AND PHOTONS (PHY-7923968 A02); 12 MONTHS \$123,896

UBERALL, HERBERT M; INTERMEDIATE-ENERGY NUCLEAR REACTIONS (PHY-8208072); 24 MONTHS \$27,305

NATIONAL ACADEMY OF SCIENCES

REED, CHARLES K; WORKSHOP ON CURRENT TRENDS IN ATOMIC SPECTROSCOPY; OCT. 24-26, 1982; TUCSON, ARIZONA (PHY-8208076); 12 MONTHS \$6,210

NATIONAL ACADEMY OF SCIENCES-NATIONAL RESEARCH COUNCIL

REED, CHARLES K; SURVEY OF CURRENT ACTIVITIES IN ATOMIC PHYSICS (PHY-8116408); 12 MONTHS \$29,810

FLORIDA

FLORIDA STATE UNIVERSITY

FOX, JOHN D; NUCLEAR REACTIONS AND STRUCTURE (PHYSICS) (PHY-8005174 A02); 12 MONTHS \$703,000

PENDL, HANS S; NUCLEAR AND HYPERNUCLEAR STRUCTURE STUDIES WITH PIONINDUCED REACTIONS (PHYSICS) (PHY-8100230 A01); 12 MONTHS \$36,000

PETROVICH, FRED L AND PHILPOTT, R J; RESEARCH IN MICROSCOPIC THEORY OF NUCLEAR REACTIONS (PHY-8122131); 12 MONTHS \$79,991

PETROVICH, FRED L; INTERNATIONAL CONFERENCE ON 'SPIN EXCITATIONS IN NUCLEI' TO (PHY-8200773); 6 MONTHS \$3,500

SHELIN, RAYMOND K; EXPERIMENTAL TESTS OF NUCLEAR MODELS (PHYSICS) (PHY-8205952); 12 MONTHS \$45,000

UNIVERSITY OF MIAMI

KURSUINOGLU, BEHRAM; ORBIS SCIENTIAE 1982 - HIGH ENERGY PHYSICS; MIAMI, FLORIDA; JANUARY, 1982 (PHY-8202437); 6 MONTHS \$3,000

GEORGIA

GEORGIA INSTITUTE OF TECHNOLOGY MAIN CAMPUS

FOX, RONALD F; FLUCTUATION PHENOMENA IN THERMAL PHYSICS (PHY-7921541 A02); 12 MONTHS \$16,924

FINKELSTEIN, DAVID; QUANTUM TOPOLOGY (PHYSICS) (PHY-8007921 A01); 24 MONTHS \$43,000

HARTER, WILLIAM G; THEORY OF HIGH RESOLUTION MOLECULAR SPECTRA (PHYSICS) (PHY-8207150); 24 MONTHS \$28,000

GEORGIA STATE UNIVERSITY

MANSON, STEVEN T; THEORETICAL STUDIES OF THE INTERACTION OF RADIATION WITH MATTER (PHY-8201371); 12 MONTHS \$20,110

UNIVERSITY OF GEORGIA

SCOTT, ALAN, AND BAKER, F TODD; INELASTIC SCATTERING OF INTERMEDIATE ENERGY PROTONS NUCLEAR STRUCTURE AND REACTION MECHANISMS (PHY-8108707 A01); 12 MONTHS \$83,700

LOVE, WILLIAM G; THE THEORETICAL STUDY OF NUCLEAR REACTIONS (PHYSICS) (PHY-8206661); 24 MONTHS \$56,329

ILLINOIS

ARGONNE NATIONAL LABORATORY

DIEBOLD, ROBERT E; DPF SUMMER STUDY ON ELEMENTARY PARTICLE PHYSICS AND FUTURE FACILITIES; ASPEN, COLORADO; JUNE 28 - JULY 16, 1982 (PHY-8211510); 12 MONTHS \$21,000

FERMI NATIONAL ACCELERATOR LABORATORY

LEDERMAN, LEON M; PAN AMERICAN SYMPOSIUM ON PARTICLE PHYSICS AND TECHNOLOGY; COCOYOC, MEXICO; JANUARY 1982 (INT-8120902*); 6 MONTHS \$5,400

ILLINOIS INSTITUTE OF TECHNOLOGY

BURNSTEIN, RAY A, RUBIN, HOWARD A, AND HANLON, JAMES E; NEUTRINO INTERACTIONS ON NEUTRONS AND PROTONS (PHYSICS) (PHY-8111728 A01); 12 MONTHS \$100,000

ERNST, FREDERICK J, AND HAUSER, ISIDORE; SEARCH FOR AND ANALYSIS OF EXACT SOLUTIONS OF EINSTEIN'S FIELD EQUATIONS (PHY-8205608); 24 MONTHS \$51,250

ERNST, FREDERICK J, AND HAUSER, ISIDORE; SEARCH FOR AND ANALYSIS OF EXACT SOLUTIONS OF EINSTEIN'S FIELD EQUATIONS (PHYSICS) (PHY-8205608 A01); \$5,000

NORTHWESTERN UNIVERSITY

SEGEL, RALPH E; INTERMEDIATE ENERGY NUCLEAR RESEARCH (PHY-7909270 A03); 12 MONTHS \$67,653

OAKES, ROBERT J; ELEMENTARY PARTICLE THEORY (PHY-8209145); 12 MONTHS \$10,000

SEGEL, RALPH E; INTERMEDIATE ENERGY NUCLEAR RESEARCH (PHYSICS) (PHY-8211193); 12 MONTHS \$92,917

UNIVERSITY OF CHICAGO

NAMBU, YOICHIRO; THEORETICAL RESEARCH IN ELEMENTARY PARTICLE PHYSICS (PHY-7923669 A02); 12 MONTHS \$180,000

CRONIN, JAMES W, AND PILCHER, JAMES E; ELEMENTARY PARTICLE PHYSICS (PHY-8002441 A03); 12 MONTHS \$2,000,000

CHANDRASEKHAR, S, GEROCHE, ROBERT P, IPSER, JAMES R, AND WALD, ROBERT M; RESEARCH IN GRAVITATIONAL PHYSICS AND RELATIVISTIC ASTROPHYSICS (PHY-8026043 A01); 12 MONTHS \$141,200

OKA, TAKESHI; INFRARED SPECTROSCOPY OF MOLECULAR IONS (PHY-8113097 A02); 12 MONTHS \$131,000

UNIVERSITY OF ILLINOIS AT CHICAGO CIRCLE

MCLEOD, DONALD W, ABRAMS, ROBERT, GOLDBERG, HOWARD S, HALLIWELL, CLIVE, AND MARGULIES, SEYMOUR; STUDY OF HADRON JETS (PHYSICS) (PHY-8108493 A01); 12 MONTHS \$165,000

RHODES, CHARLES K, PUMMER, HERBERT, EGGER, HANS, AND ROTH-SCHILD, MORDEKHAY; VUV AND XUV STUDIES OF HIGHLY EXCITED ATOMIC AND MOLECULAR ELECTRONIC STATES (PHY-8116626); 12 MONTHS \$110,509

UNIVERSITY OF ILLINOIS AT URBANA

SMARR, LARRY L; NUMERICAL, THEORETICAL, AND ASTROPHYSICAL RELATIVITY (PHYSICS) (PHY-8001496 A02); 12 MONTHS \$70,627

AXEL, PETER, AND CARDMAN, L S; HIGH DUTY CYCLE ELECTRON ACCELERATORS AND NUCLEAR PHYSICS RESEARCH (PHY-8023603 A01); 12 MONTHS \$2,750,000

LAMB, FREDERICK K, PETHICK, C J, AND PINES, DAVID; ASTROPHYSICAL APPLICATIONS OF MICROSCOPIC AND MANY-BODY PHYSICS (PHY-8025605 A01); 12 MONTHS \$176,700

BAYM, GORDON A, FRADKIN, E H, STONE, M, AND WORTIS, MICHAEL; PROPERTIES OF CONDENSED MATTER SYSTEMS AND FIELD THEORIES (DMR-8117182*); 12 MONTHS \$43,000

PANDHARIPANDE, V R; MICROSCOPIC THEORY OF NUCLEI, NUCLEAR, AND NEUTRON STAR MATTER (PHY-8121399); 12 MONTHS \$86,200

RAVENHALL, DAVID G, AND WYLD, HENRY W; THEORETICAL PARTICLE AND NUCLEAR PHYSICS (PHY-8201948); 12 MONTHS \$215,532

RAVENHALL, DAVID G, AND WYLD, HENRY W; THEORETICAL PARTICLE AND NUCLEAR PHYSICS (PHY-8201948 A01); \$6,219

SMARR, LARRY L; COMPUTER GRAPHICS DATA MANAGEMENT FACILITY (PHY-8209554); 12 MONTHS \$60,000

INDIANA

INDIANA UNIVERSITY, BLOOMINGTON

WALKER, GEORGE E, AND LONDERGAN, JOHN T; A THEORETICAL STUDY OF NUCLEAR STRUCTURE PHYSICS AND INTERMEDIATE ENERGY NUCLEAR REACTIONS (PHY-8007997 A02); 12 MONTHS \$86,210

NEWTON, ROGER G; INVESTIGATIONS IN THE THEORY AND INTERPRETATION OF PARTICLE COLLISIONS (PHY-8020457 A01); 12 MONTHS \$23,757

MILLER, DANIEL W, AND SINGH, PAUL P; NUCLEAR STRUCTURE AND NUCLEAR PROCESSES AT INTERMEDIATE ENERGIES (PHY-8114339); 12 MONTHS \$4,525,000

SINGH, PAUL P, AND MILLER, DANIEL W; NUCLEAR STRUCTURE AND NUCLEAR PROCESSES AT INTERMEDIATE ENERGIES (PHYSICS) (PHY-8114339 A01); \$189,000

SINGH, PAUL P, AND MILLER, DANIEL W; NUCLEAR STRUCTURE AND NUCLEAR PROCESSES AT INTERMEDIATE ENERGIES (PHYSICS) (PHY-8114339 A02); \$1,095,000

HWANG, W-Y P; A THEORETICAL STUDY OF WEAK, ELECTROMAGNETIC, AND NUCLEAR REACTIONS AT INTERMEDIATE ENERGIES (PHYSICS) (PHY-8204297); 15 MONTHS \$19,417

MEYER, HANS O; WORKSHOP ON INTERACTION BETWEEN MEDIUM ENERGY NUCLEONS IN NUCLEI; SPENCER, INDIANA; OCTOBER 28-30, 1982 (PHY-8211351); 6 MONTHS \$5,000

PURDUE UNIVERSITY

KIM, YEONG E; STUDIES IN THE THEORY OF REACTIONS INVOLVING LIGHT NUCLEI (PHYSICS) (PHY-8005370 A01); 12 MONTHS \$50,411

SCHARENBERG, ROLF P, AND HIRSCH, ANDREW S; RELATIVISTIC PROTON-NUCLEUS COLLISIONS (PHY-8116737); 12 MONTHS \$120,000

ROSEN, S PETER; IPA MOBILITY ASSIGNMENT (PHY-8122126); 24 MONTHS \$139,669

SIMMS, PAUL C, AND RICKEY, FRANK A; COLLECTIVE STRUCTURE OF TRANSITIONAL NUCLEI (PHY-8200177); 12 MONTHS \$90,000

SIMMS, PAUL C, AND RICKEY, FRANK A; COLLECTIVE STRUCTURE OF TRANSITIONAL NUCLEI (PHY-8200177 A01); \$20,000

ANDREW, KENNETH L; ATOMIC EMISSION SPECTROSCOPY (PHYSICS) (PHY-8206778); 12 MONTHS \$35,000

UNIVERSITY OF NOTRE DAME

KENNEY, V. PAUL, BISWAS, NRIPENDRA N., CASON, NEAL M., AND SHEPHARD, WILLIAM D.: *HIGH ENERGY ELEMENTARY PARTICLE PHYSICS* (PHY-8007627 A03); 12 MONTHS \$415,000

JOHNSON, WALTER R.: *THE RELATIVISTIC RANDOM PHASE APPROXIMATION IN ATOMIC PHYSICS* (PHY-8107382 A01); 12 MONTHS \$52,514

LIVINGSTON, ARTHUR E.: *SPECTROSCOPY OF HIGHLY-IONIZED ATOMS* (PHY-8111727 A01); \$8,493

LIVINGSTON, ARTHUR E.: *SPECTROSCOPY OF HIGHLY-IONIZED ATOMS* (PHYSICS) (PHY-8111727 A02); 12 MONTHS \$62,497

POIRIER, JOHN A.: *ELEMENTARY PARTICLE PHYSICS* (PHY-8112897 A01); 12 MONTHS \$155,000

BROWNE, CORNELIUS P.: *NUCLEAR STRUCTURE RESEARCH* (PHYSICS) (PHY-8200426); 12 MONTHS \$480,000

KANSAS

UNIVERSITY OF KANSAS MAIN CAMPUS

AMMAR, RAYMOND G., DAVIS, ROBIN, AND KWAK, NOWHAN.: *ELEMENTARY PARTICLES AT HIGH ENERGIES* (PHY-8204162); 12 MONTHS \$131,000

KENTUCKY

UNIVERSITY OF KENTUCKY

MCELLISTREM, MARCUS T.: *NEUTRON AND PROTON INDUCED REACTIONS, NUCLEAR STRUCTURE STUDIES WITH NEUTRONS* (PHY-8105572 A02); 12 MONTHS \$186,500

MAC ADAM, KEITH B.: *COLLISIONS OF IONS WITH HIGHLY EXCITED ATOMS* (PHYSICS) (PHY-8205346); 12 MONTHS \$65,000

UNIVERSITY OF LOUISVILLE

KIELKOPF, JOHN F.: *COLLISIONAL INTENSITY AND BROADENING EFFECTS ON ATOMIC SPECTRAL LINES* (PHYSICS) (PHY-8206145); 12 MONTHS \$23,000

LOUISIANA

LOUISIANA STATE UNIVERSITY, BATON ROUGE

DRAAYER, JERRY P.: *NUCLEAR STRUCTURE THEORY* (PHYSICS) (PHY-8010661 A02); 12 MONTHS \$36,793

HAMILTON, WILLIAM O.: *EXPERIMENTAL INVESTIGATIONS IN GRAVITATION* (PHY-8107388); 12 MONTHS \$233,118

RAU, A. R. P.: *ALGEBRAIC APPROACH TO ELECTRON CORRELATIONS IN ATOMS* (PHY-8120243); 12 MONTHS \$24,869

ZIMMERMAN, PETER D.: *INTERMEDIATE ENERGY ELECTRON AND PHOTON STUDIES OF NUCLEI* (PHY-8203440); 12 MONTHS \$73,000

GREENE, CHRIS H.: *HYPERSPHERICAL APPROACH FOR STRONG CORRELATIONS IN ATOMS AND MOLECULES* (PHYSICS) (PHY-8211387); 24 MONTHS \$50,000

JONES, W. V.: *JAPANESE-AMERICAN COOPERATIVE EXPERIMENT TO STUDY THE NUCLEAR INTERACTIONS, CHARGE COMPOSITION, AND ENERGY SPECTRA OF COSMIC RAYS AT ENERGIES UP TO 10 14 EV* (PHYSICS) (PHY-8242371); 12 MONTHS \$95,715

TULANE UNIVERSITY

GOODMAN, ALAN L.: *THEORETICAL NUCLEAR PHYSICS* (PHY-8206114); 24 MONTHS \$36,000

MARYLAND

JOHNS HOPKINS UNIVERSITY

JUDD, BRIAN R.: *THEORY OF ATOMIC STRUCTURE* (PHY-7921257 A03); 12 MONTHS \$66,000

PEVSNER, AIHUD.: *HIGH ENERGY PARTICLE PHYSICS* (PHY-8023687 A02); 12 MONTHS \$530,000

PEVSNER, AIHUD.: *HIGH ENERGY PARTICLE PHYSICS* (PHY-8023687 A03); \$100,000

NATIONAL BUREAU OF STANDARDS

TAYLOR, BARRY N.: *THE NATIONAL BUREAU OF STANDARDS PRECISION MEASUREMENT GRANTS PROGRAM* (PHY-8100177 A01); 12 MONTHS \$62,700

UNIVERSITY OF MARYLAND, COLLEGE PARK

WEBER, JOE, DAVIS, WILLIAM S., PAIK, HO-JUNG, AND RICHARD, JEAN PAUL.: *RESEARCH AND DEVELOPMENT OF GRAVITATIONAL RADIATION ANTENNAS* (PHY-7911975 A03); 12 MONTHS \$311,000

SUCHER, JOSEPH.: *FOUNDATIONS OF RELATIVISTIC QUANTUM THEORY, INTERACTIONS OF HADRONS, AND ELECTROMAGNETIC INTERACTIONS OF ELEMENTARY SYSTEMS* (PHY-7923602 A02); 12 MONTHS \$90,412

GRIEM, HANS R. AND DE SILVA, ALAN W.: *PLASMA HEATING, LIGHT SCATTERING AND SPECTROSCOPY* (PHY-8002905 A02); 12 MONTHS \$165,968

GREENBERG, OSCAR W. AND PATI, JOGESH C.: *PARTICLE THEORY AND QUANTUM FIELD THEORY* (PHYSICS) (PHY-8007289 A02); 12 MONTHS \$116,000

LEE, Y. C.: *NONLINEAR METHODS IN PLASMA PHYSICS* (PHY-8014189 A01); 12 MONTHS \$44,000

GINTER, MARSHALL L.: *EXTENSION OF MULTICHANNEL QUANTUM DEFECT THEORY TO COMPLEX MULTILIMIT ELECTRONIC STRUCTURES* (PHY-8016657 A02); 12 MONTHS \$62,000

CHANT, NICHOLAS S.: *EXPERIMENTAL NUCLEAR PHYSICS RESEARCH PROGRAM* (PHY-8022787 A01); 12 MONTHS \$390,000

HU, BEI-LOK.: *RESEARCH IN GENERAL RELATIVITY AND RELATIVISTIC COSMOLOGY* (PHY-8107387); 24 MONTHS \$24,000

HU, BEI-LOK.: *RESEARCH IN GENERAL RELATIVITY AND RELATIVISTIC COSMOLOGY* (PHY-8107387 A01); \$7,043

WEINER, JOHN.: *DIRECT OBSERVATION OF OIN DIMER ELECTRONIC STATE TRANSITIONS* (ATOMIC PHYSICS) (PHY-8111743 A01); 12 MONTHS \$71,400

BOYD, DEREK A., ELLIS, R. F., LIU, CHUAN S., AND OTT, EDWARD.: *STUDY OF HIGH TEMPERATURE PLASMAS* (PHYSICS) (PHY-8205632); 12 MONTHS \$230,000

BRILL, DIETER R.: *THEORETICAL RESEARCH IN COSMOLOGY AND RELATIVITY* (PHY-8205659); 12 MONTHS \$63,549

BRILL, DIETER R. AND HU, BEI-LOK.: *GROUP TRAVEL FOR THIRD MARCEL GROSSMAN MEETING, SHANGHAI, CHINA AUGUST 29 - SEPTEMBER 2, 1982* (PHYSICS) (PHY-8206754); 12 MONTHS \$38,750

YODH, GAURANG B. AND GOODMAN, JORDAN A.: *SEARCH FOR MASSIVE PARTICLES AND DETERMINATION OF COMPOSITION OF PRIMARY COSMIC RAYS* (PHY-8207425); 12 MONTHS \$160,000

BREUER, H. F.: *NUCLEAR PHYSICS DATA ANALYSIS COMPUTER SYSTEM* (PHY-8210478); 12 MONTHS \$111,220

MASSACHUSETTS

BOSTON UNIVERSITY

MILLER, JAMES P. AND ROBERTS, BRADLEY L.: *EXOTIC ATOM STUDIES* (PHYSICS) (PHY-7923778 A02); 12 MONTHS \$60,000

BOOTH, EDWARD C.: *PHOTOPRODUCTION OF PIONS FROM COMPLEX NUCLEI* (PHY-8007967 A02); 12 MONTHS \$130,000

BRANDEIS UNIVERSITY

GRISARU, M. T.: *THEORETICAL RESEARCH IN QUANTUM GRAVITY AND PARTICLE PHYSICS* (PHY-7920801 A01); 24 MONTHS \$41,965

DESER, STANLEY.: *RESEARCH IN SUPERGRAVITY, GENERAL RELATIVITY, AND GAUGE THEORIES* (PHYSICS) (PHY-8201094); 12 MONTHS \$46,083

BERKO, STEPHAN, AND CANTER, KARL F.: *FORMATION AND PROPERTIES OF POSITRONIUM* (ATOMIC PHYSICS) (PHY-8208764); 12 MONTHS \$59,711

HARVARD UNIVERSITY

COLEMAN, SIDNEY R., GLASHOW, SHELDON L., AND WEINBERG, STEVEN.: *INTERACTIONS OF PARTICLES AND FIELDS* (PHY-7722864 A04); 12 MONTHS \$332,000

PRESS, WILLIAM H. AND EARDLEY, DOUGLAS M.: *COSMOLOGY, RELATIVITY, AND THEORETICAL ASTROPHYSICS* (PHY-8007351 A02); 12 MONTHS \$147,044

PIPKIN, FRANCIS M. AND LUNDEEN, STEPHEN R.: *ATOMIC PHYSICS EXPERIMENTS USING FAST ATOMIC BEAMS* (PHY-8026547 A01); 12 MONTHS \$178,000

JAFFE, ARTHUR M.: *MATHEMATICAL PHYSICS* (PHY-8203669*); 12 MONTHS \$67,000

MOSSBERG, THOMAS W.: *MACROSCOPIC COHERENCE AND ITS APPLICATIONS TO SPECTROSCOPY* (PHYSICS) (PHY-8207080); 12 MONTHS \$55,000

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

KLEPPNER, DANIEL, AND PRITCHARD, DAVID E.: *ATOMIC AND MOLECULAR PHYSICS* (PHY-7909743 A03); 12 MONTHS \$298,000

FELD, MICHAEL S.: *LASER INDUCED NUCLEAR ORIENTATION* (PHYSICS) (PHY-8103075 A01); 12 MONTHS \$60,000

SHAPIRO, IRWIN I.: *TESTS OF THEORIES OF GRAVITATION* (PHY-8106036 A01); 12 MONTHS \$202,400

CHENG, HUNG, AND FREEDMAN, DANIEL Z.: *RESEARCH IN THEORETICAL HIGH-ENERGY PHYSICS* (PHY-8107394 A01); 12 MONTHS \$120,000

WEISS, RAINER, AND LINSAY, PAUL S.: *INTERFEROMETRIC BROAD BAND GRAVITATIONAL ANTENNA* (PHYSICS) (PHY-8109581 A02); 12 MONTHS \$437,783

HAUS, HERMANN A. AND FREED, CHARLES.: *INVESTIGATION OF PRESSURE SHIFT IN CO₂ ISOTOPES* (PHYSICS) (PHY-8111338 A01); 12 MONTHS \$61,000

FIELD, ROBERT W.: *DIATOMIC MOLECULE ELECTRONIC SPECTROSCOPY BEYOND MOLECULAR CONSTANTS* (PHY-8112546 A01); \$26,000

FIELD, ROBERT W.: *DIATOMIC MOLECULE ELECTRONIC SPECTROSCOPY BEYOND MOLECULAR CONSTANTS* (PHY-8112546 A02); 12 MONTHS \$107,000

EZEKIEL, SHAOUL.: *EXPERIMENTAL AND THEORETICAL INVESTIGATIONS OF INTERACTIONS OF WEAK AND INTENSE FIELDS WITH ATOMS AND MOLECULES* (PHYSICS) (PHY-8210369); 12 MONTHS \$125,700

KLEPPNER, DANIEL.: *ELECTRODYNAMIC ORIGINS OF QUANTUM NOISE AND COHERENCE* (PHYSICS) (PHY-8210486); 12 MONTHS \$70,000

KERMAN, ARTHUR K.: *NUCLEAR COLLECTIVE PHENOMENA AND HEAVY ION COLLISIONS* (PHYSICS) (PHY-8210540); 24 MONTHS \$84,344

NORTHEASTERN UNIVERSITY

VON GOELER, EBERHARD, AND WEINSTEIN, ROY.: *ELEMENTARY PARTICLE PHYSICS EXPERIMENTS* (PHY-7900020 A03); 12 MONTHS \$287,247

VON GOELER, EBERHARD, AND WEINSTEIN, ROY.: *ELEMENTARY PARTICLE PHYSICS EXPERIMENTS* (PHY-7900020 A04); \$8,000

GETTNER, MARVIN, AND FAISLER, WILLIAM.: *EXPLORATION OF NEW PHYSICS AT PEP* (PHY-7920821 A02); 12 MONTHS \$150,000

GARELICK, DAVID A. AND GLAUBMAN, MICHAEL J.: *QUARKS AND LEPTONS* (PHY-7921990 A03); 12 MONTHS \$115,000

GARELICK, DAVID A. AND GLAUBMAN, MICHAEL J.: *QUARKS AND LEPTONS* (PHYSICS) (PHY-7921990 A04); \$17,000

ARNOWITT, RICHARD, AND NATH, PRAN.: *RESEARCH IN PARTICLE THEORY* (PHYSICS) (PHY-8008333 A02); 12 MONTHS \$69,238

GOLDBERG, HYMAN, AND AARON, RONALD.: *RESEARCH IN ELEMENTARY PARTICLE THEORY* (PHY-8116752); 12 MONTHS \$38,040

SOUTHEASTERN MASSACHUSETTS UNIVERSITY

RUSSELL, JOHN J; *EXPERIMENTAL STUDIES OF QUARK INTERACTIONS* (PHY-8023435 A01); 12 MONTHS \$48,000

BAR-YAM, ZVI B, KERN, WOLFHARD, AND DOWD, JOHN P; *RESEARCH IN HADRON SPECTROSCOPY* (PHY-8120739); 12 MONTHS \$60,000

TUFTS UNIVERSITY

VILENKIN, ALEXANDER; *GRAND UNIFIED THEORIES AND COSMOLOGY (PHYSICS)* (PHY-8306202); 24 MONTHS \$29,555

UNIVERSITY OF MASSACHUSETTS, AMHERST

BREHM, JOHN J, GOLOWICH, EUGENE, SWIFT, ARTHUR R, AND HOLSTEIN, BARRY R; *ELEMENTARY PARTICLE THEORY* (PHY-7920342 A02); 7 MONTHS \$20,442

BREHM, JOHN J, GOLOWICH, EUGENE, SWIFT, ARTHUR R, AND HOLSTEIN, BARRY R; *ELEMENTARY PARTICLE THEORY* (PHY-7920342 A03); 17 MONTHS \$147,674

DONOGHUE, JOHN F; *THEORETICAL ELEMENTARY PARTICLE PHYSICS* (PHY-8016167 A01); 12 MONTHS \$30,100

KREISLER, MICHAEL N, RABIN, MONROE S, AND JENSEN, DOUGLAS A; *HIGH ENERGY PHYSICS - SPARK CHAMBER PROGRAM* (PHY-8102876 A02); 12 MONTHS \$345,758

KREISLER, MICHAEL N, JENSEN, DOUGLAS A, AND RABIN, MONROE S; *HIGH ENERGY PHYSICS - SPARK CHAMBER PROGRAM* (PHY-8102876 A03); \$75,000

WILLIAMS COLLEGE

CRAMPTON, STUART B; *RESONANCE STUDIES OF FREE H ATOMS AT LIQUID HELIUM TEMPERATURES* (PHY-8120579); 12 MONTHS \$30,000

WORCESTER POLYTECHNIC INSTITUTE

GOLOSIE, RAYMOND; *ELECTROMAGNETIC INTERACTIONS WITH VERY LIGHT NUCLEI (PHYSICS)* (PHY-8122214); 12 MONTHS \$36,900

MICHIGAN

MICHIGAN STATE UNIVERSITY

MC MANUS, HUGH; *NUCLEAR SCATTERING AND STRUCTURE* (PHY-7922054 A02); 12 MONTHS \$28,189

BLOSSER, HENRY G, AND AUSTIN, SAM M; *RESEARCH WITH HEAVY IONS USING A 500 MEV SUPERCONDUCTING CYCLOTRON* (PHY-8017605 A03*); 6 MONTHS \$1,400,000

BLOSSER, HENRY G, AND AUSTIN, SAM M; *RESEARCH WITH HEAVY IONS USING A 500 MEV SUPERCONDUCTING CYCLOTRON* (PHY-8017605 A04*); 6 MONTHS \$1,461,396

BLOSSER, HENRY G; *RESEARCH WITH HEAVY IONS USING A 500 MEV SUPERCONDUCTING CYCLOTRON* (PHY-8017605 A05); \$100,000

PUMPLIN, JON C, AND REPKO, WAYNE W; *THEORETICAL STUDIES OF ELECTROMAGNETIC AND HADRONIC INTERACTIONS (PHYSICS)* (PHY-8105020 A01); 12 MONTHS \$63,725

SMITH, GERALD A; *HIGH ENERGY INTERACTIONS* (PHY-8116624); 12 MONTHS \$400,000

SMITH, GERALD A; *HIGH ENERGY INTERACTIONS (PHYSICS)* (PHY-8116624 A01); \$29,600

COLLINS, MARIS A; *INVESTIGATIONS IN ELEMENTARY PARTICLE PHYSICS* (PHY-8117256); 12 MONTHS \$237,120

CRAWLEY, GERARD M; *INTERNATIONAL CONFERENCE ON NUCLEUS-NUCLEUS COLLISIONS: EAST LANSING, MICHIGAN; SEPTEMBER 26-OCTOBER 1, 1982* (PHY-8305134); 12 MONTHS \$10,000

UNIVERSITY OF MICHIGAN-ANN ARBOR

JANECKE, JOACHIM W, AND BECCHETTI, FREDERICK D; *EXPERIMENTAL NUCLEAR SCIENCE* (PHY-7807754 A05); 12 MONTHS \$120,000

SAVIT, ROBERT; *BASIC RESEARCH ON COOPERATIVE AND CRITICAL PHENOMENA IN FIELD THEORIES AND STATISTICAL SYSTEMS (PHYSICS)* (PHY-7808426 A03); 12 MONTHS \$51,000

WEINREICH, GABRIEL; *DYNAMICS AND RADIATION FIELD OF MUSICAL INSTRUMENTS (PHYSICS)* (PHY-8017326 A01); 12 MONTHS \$60,000

RICH, ARTHUR, GIDLEY, DAVID W, AND NEWMAN, DAVID E; *INVESTIGATIONS OF LOW ENERGY LEPTON INTERACTIONS (PHYSICS)* (PHY-8107579 A01); 12 MONTHS \$190,000

NEWMAN, DAVID E, AND RICH, ARTHUR; *PRECISION POSITRON POLARIMETRY - A NEW TECHNIQUE IN WEAK INTERACTION STUDIES* (PHY-8109269 A01); 12 MONTHS \$65,000

WIEMAN, CARL E; *PRECISION MEASUREMENT OF THE ELECTROWEAK COUPLING CONSTANTS (PHYSICS)* (PHY-8111118 A01); 12 MONTHS \$100,000

JANECKE, JOACHIM W; *ATOMIC MASSES* (PHY-8114430); 24 MONTHS \$40,000

ROE, BYRON P; *NEUTRINO GROUP* (PHY-8115562); 12 MONTHS \$205,000

WILLIAMS, WILLIAM L; *EXPERIMENTAL STUDY OF WEAK NEUTRAL CURRENT INTERACTIONS IN ATOMIC HYDROGEN AND DEUTERIUM* (PHY-8120138); 12 MONTHS \$144,927

JONES, LAWRENCE W, LONGO, MICHAEL J, OVERSETH, OLIVER E, AND GUSTAFSON, H RICHARD; *ELEMENTARY PARTICLE PHYSICS* (PHY-8306163); 12 MONTHS \$479,820

HECHT, K T; *NUCLEAR STRUCTURE THEORY (PHYSICS)* (PHY-8306842); 24 MONTHS \$110,000

WAYNE STATE UNIVERSITY

STEIN, TALBERT S, AND KAUPPIA, WALTER E; *EXPERIMENTAL STUDIES OF POSITRON SCATTERING BY ATOMS AND MOLECULES (PHYSICS)* (PHY-8007984 A02); 12 MONTHS \$138,209

MINNESOTA

UNIVERSITY OF MINNESOTA

GREENLEES, GEORGE W; *OPTICAL HYPERFINE STRUCTURE AND ISOTOPIC SHIFT STUDIES* (PHY-7921336 A02); 12 MONTHS \$75,000

FRIER, PHYLLIS S, AND WADDINGTON, C J; *CHARACTERISTICS OF HIGH ENERGY NUCLEUS-NUCLEUS INTERACTIONS* (PHY-8119421); 12 MONTHS \$57,877

MISSOURI

UNIVERSITY OF MISSOURI, ROLLA

PARK, JOHN T, AND PEACHER, JERRY L; *THE PHYSICS OF ONE ELECTRON AND PSEUDO ONE-ELECTRON COLLISION SYSTEMS* (PHY-8106050 A01); 12 MONTHS \$110,000

UNIVERSITY OF MISSOURI, ST LOUIS

CHENG, TA PEI; *STUDIES IN QUANTUM FLAVORDYNAMICS (PHYSICS)* (PHY-8005229 A01); 24 MONTHS \$32,726

WASHINGTON UNIVERSITY

CLARK, JOHN W; *MICROSCOPIC THEORY OF QUANTUM FLUIDS AND EXTENDED NUCLEAR SYSTEMS* (DMR-8008229 A02*); 12 MONTHS \$14,900

WILL, CLIFFORD M; *RELATIVISTIC GRAVITATION AND ASTROPHYSICS* (PHY-8115800); 12 MONTHS \$30,000

NEBRASKA

UNIVERSITY OF NEBRASKA AT LINCOLN

RUDD, M, JAECKS, DUANE H, AND BURNS, DONALD; *INELASTIC PROCESSES IN ATOMIC COLLISIONS* (PHY-8055599 A01); 12 MONTHS \$236,265

STARACE, ANTHONY F; *THEORY OF ELECTRON CORRELATIONS IN ATOMIC PROCESSES* (PHY-7906053 A01); \$24,560

MAECK, JOSEPH; *THEORY C W ATOMIC COLLISIONS* (PHY-8303400); 12 MONTHS \$63,000

NEW HAMPSHIRE

UNIVERSITY OF NEW HAMPSHIRE, DURHAM

SHEPARD, HARVEY K; *QUANTUM FIELD THEORY* (PHY-8106763 A01); 12 MONTHS \$17,462

BALLING, LUDWIG C; *SPECTROSCOPY OF METAL ATOMS TRAPPED IN RARE-GAS MATRICES (PHYSICS)* (PHY-8303895); 12 MONTHS \$45,000

NEW JERSEY

INSTITUTE FOR ADVANCED STUDY

BAHCALL, JOHN N, AND DYSON, FREEMAN J; *THEORETICAL PHYSICS* (PHY-7919884 A03); 12 MONTHS \$195,000

ADLER, STEPHEN L, BAHCALL, JOHN N, AND DASHEN, ROGER F; *PURCHASE AND OPERATION OF A COMPUTER FOR RESEARCH IN ASTROPHYSICS AND HIGH ENERGY PHYSICS* (PHY-8008817 A01*); 12 MONTHS \$53,181

PRINCETON UNIVERSITY

TREIMAN, SAM; *THEORETICAL RESEARCH IN ELEMENTARY PARTICLE PHYSICS AND QUANTUM GRAVITY* (PHY-8019754 A01); 12 MONTHS \$335,000

CALAPRICE, FRANK P, SHERR, RUBBY, AND NAUMANN, ROBERT A; *LOW ENERGY NUCLEAR PHYSICS* (PHY-8105673 A01); 12 MONTHS \$940,000

LIEB, ELLIOTT; *STATISTICAL MECHANICS AND THE QUANTUM AND CLASSICAL MANY BODY PROBLEMS* (PHY-8116101*); 12 MONTHS \$38,000

WIGHTMAN, ARTHUR S; *THEORETICAL PHYSICS* (PHY-8117463); 12 MONTHS \$70,000

WILKINSON, DAVID T, AND PEEBLES, P J E; *RESEARCH ON GRAVITATION, RELATIVITY AND COSMOLOGY* (PHY-8118157); 12 MONTHS \$295,000

WILKINSON, DAVID T, AND PEEBLES, P J E; *RESEARCH ON GRAVITATION, RELATIVITY AND COSMOLOGY (PHYSICS)* (PHY-8118157 A01); \$30,000

COYNE, DONALD G, AND O'NEILL, GERARD K; *ELEMENTARY PARTICLE PHYSICS* (PHY-8308761); 12 MONTHS \$335,000

RUTGERS UNIVERSITY-BUSCH CAMPUS

DEVLIN, THOMAS J; *EXPERIMENTAL ELEMENTARY PARTICLE PHYSICS* (PHY-8021261 A01); 12 MONTHS \$247,300

DEVLIN, THOMAS J; *EXPERIMENTAL ELEMENTARY PARTICLE PHYSICS* (PHY-8021261 A02); \$35,000

PLANO, RICHARD J; *EXPERIMENTAL STUDIES OF THE STRONG AND WEAK INTERACTIONS* (PHY-8023190 A01); 12 MONTHS \$275,000

PLANO, RICHARD J; *EXPERIMENTAL STUDIES OF THE STRONG AND WEAK INTERACTIONS (PHYSICS)* (PHY-8023190 A02); \$21,000

SANNES, FELIX R; *EXPERIMENTAL ELEMENTARY PARTICLE PHYSICS* (PHY-8119859); 12 MONTHS \$208,000

GOLDSTEIN, SHELTON; *EXACT RESULTS IN STATISTICAL MECHANICS (PHYSICS)* (PHY-8301708); 36 MONTHS \$39,146

RUTGERS UNIVERSITY

GLASHAUSSER, CHARLES M; *ELASTIC AND INELASTIC SCATTERING OF INTERMEDIATE ENERGY PROTONS* (PHY-7923223 A03); 12 MONTHS \$70,000

TEMMER, GEORGES M; *RESEARCH WITH TANDEM PARTICLE ACCELERATOR* (PHY-7923340 A03); 12 MONTHS \$600,000

LEBOWITZ, JOEL L; *BASIC STUDIES IN STATISTICAL MECHANICS* (DMR-8114736*); 12 MONTHS \$34,000

WATTS, TERENCE L; *STUDY OF PARTON-PARTON PROCESSES IN HADRON COLLISIONS* (PHY-8120063); 12 MONTHS \$47,000

ZAMICK, LARRY, AND MEKJIAN, ARAM; *THEORETICAL NUCLEAR PHYSICS AT RUTGERS* (PHY-8302352); 12 MONTHS \$95,000

ANDREI, NATAN; *THEORETICAL HIGH ENERGY PHYSICS (PHY-8209055)*; 12 MONTHS \$14,873

STEVENS INSTITUTE OF TECHNOLOGY

SEIDL, MILOS; *ION PRODUCTION IN PLASMA-SURFACE INTERACTIONS (PHYSICS) (PHY-8205886)*; 12 MONTHS \$80,000

NEW MEXICO

DEPARTMENT OF ENERGY-ALBUQUERQUE OPERATIONS OFFICE

HASSLACHER, BROSL; *STUDIES IN THEORETICAL PHYSICS (PHY-8206881)*; 12 MONTHS \$40,000

UNIVERSITY OF NEW MEXICO

LINSLEY, JOHN; *HIGHEST ENERGY COSMIC RAYS (PHY-8119296)*; 9 MONTHS \$27,564

NEW YORK

AMERICAN PHYSICAL SOCIETY

DIEBOLD, ROBERT E; *GROUP TRAVEL TO ATTEND THE 21ST INTERNATIONAL CONFERENCE ON HIGH ENERGY PHYSICS, PARIS, FRANCE, JULY 26-31, 1982 (PHY-8207091)*; 6 MONTHS \$20,000

BROOKLYN COLLEGE

SHAKIN, CARL M; *THEORETICAL NUCLEAR PHYSICS (PHY-8004474 A02)*; 12 MONTHS \$62,106

CELENZA, LOUIS S; *A RELATIVISTIC DESCRIPTION OF NUCLEAR PHYSICS (PHY-8204171)*; 12 MONTHS \$18,000

CITY COLLEGE

LUBELL, MICHAEL S; *SPIN DEPENDENCE STUDIES IN ELECTRON-ATOM COLLISIONS (PHY-8020757 A01)*; 12 MONTHS \$86,789

LUBELL, MICHAEL S; *SPIN DEPENDENCE STUDIES IN ELECTRON-ATOM COLLISIONS (PHYSICS) (PHY-8020757 A02)*; \$17,200

COLUMBIA UNIVERSITY

SACHS, ALLAN M; *PRECISION MEASUREMENT OF VACUUM POLARIZATION IN MUONIC HELIUM TRANSITIONS (PHY-7924605 A02)*; 12 MONTHS \$180,000

SPIEGEL, EDWARD A. AND RUDERMAN, MALVIN A; *ENERGETIC AND HYDROMAGNETIC PROCESSES IN ROTATING COSMIC BODIES (PHYSICS) (PHY-8023721 A01)*; 12 MONTHS \$133,241

WU, C. S. GROVES, JOEL L. AND DUGAN, GERALD; *LOW AND MEDIUM ENERGY PHYSICS (PHY-8025317 A01*)*; 12 MONTHS \$280,000

BALTAY, CHARLES, FRANZINI, PAOLO, LEE, WONYONG, SCIULLI, FRANK J. AND WILSON, ROBERT R; *HIGH ENERGY PHYSICS RESEARCH (PHY-8107116 A02)*; 12 MONTHS \$2,750,000

BALTAY, CHARLES, FRANZINI, PAOLO, LEE, WONYONG, SCIULLI, FRANK J. AND WILSON, ROBERT R; *HIGH ENERGY PHYSICS RESEARCH (PHY-8107116 A03)*; \$147,000

CORNELL UNIVERSITY-CORNELL UNIVERSITY - ENDOWED

YENNIE, DONALD R. AND GOTTFRIED, KURT; *THEORETICAL ELEMENTARY PARTICLE PHYSICS (PHY-7723336 A05)*; 12 MONTHS \$450,000

WILSON, KENNETH G; *ACQUISITION OF AN ARRAY PROCESSOR FOR SCIENTIFIC COMPUTING (DMR-7927167 A01*)*; 12 MONTHS \$27,300

YENNIE, DONALD R; *BLACK-HOLE PHYSICS AND RELATIVISTIC ASTROPHYSICS (PHY-8007957 A02)*; 12 MONTHS \$46,600

MCDANIEL, BOYCE D; *OPERATION OF THE CORNELL ELECTRON STORAGE RING FACILITY (PHY-8022200 A04)*; 4 MONTHS \$2,700,000

MCDANIEL, BOYCE D; *OPERATION OF THE CORNELL ELECTRON STORAGE RING FACILITY (PHY-8022200 A05)*; 10 MONTHS \$5,400,000

MCDANIEL, BOYCE D; *OPERATION OF THE CORNELL ELECTRON STORAGE RING FACILITY (PHY-8022200 A06)*; \$56,000

OREAR, JAY; *ELASTIC SCATTERING AT HIGH ENERGIES AND HIGH MOMENTUM TRANSFER (PHYSICS) (PHY-8023452 A02)*; 12 MONTHS \$46,191

NEW YORK UNIVERSITY

SPRUCH, LARRY, AND ROSENBERG, LEONARD; *A THEORETICAL INVESTIGATION OF ATOMIC SCATTERING PROCESSES (PHY-7910413 A03)*; 12 MONTHS \$50,000

CHRISTENSON, JAMES H; *ELEMENTARY PARTICLE RESEARCH USING ELECTRONIC DETECTORS (PHY-7922102 A02)*; 12 MONTHS \$305,000

CHRISTENSON, JAMES H; *ELEMENTARY PARTICLE RESEARCH USING ELECTRONIC DETECTORS (PHY-7922102 A03)*; \$43,000

BEDERSON, BENJAMIN; *ATOMIC INTERACTIONS WITH ELECTRONS AND FIELDS IN GROUND AND EXCITED STATES (PHY-7926286 A02)*; 12 MONTHS \$141,131

SIRLIN, ALBERTO, BRANDT, RICHARD A, LOWENSTEIN, JOHN H. AND ZWANZIGER, DANIEL; *PARTICLE AND QUANTUM FIELD THEORY INVESTIGATIONS (PHY-8116102)*; 12 MONTHS \$148,151

SIRLIN, ALBERTO, BRANDT, RICHARD A, LOWENSTEIN, JOHN H. AND ZWANZIGER, DANIEL; *PARTICLE AND QUANTUM FIELD THEORY INVESTIGATIONS (PHYSICS) (PHY-8116102 A01)*; \$27,936

STROKE, H HENRY; *HIGH RESOLUTION OPTICAL MEASUREMENTS, ATOMIC HYPERFINE STRUCTURE AND ISOTOPE SHIFT (PHYSICS) (PHY-8204402)*; 12 MONTHS \$126,000

BROWN, HOWARD H; *A STUDY OF HOMOGENEOUS STEADY STATE PLASMAS IN RF ELECTROMAGNETIC FIELDS (PHYSICS) (PHY-8205960)*; 12 MONTHS \$53,000

RENSSELAER POLYTECHNIC INSTITUTE

WINHOLD, E JOHN, AND YERGIN, PAUL F; *PHOTOPION REACTIONS IN COMPLEX NUCLEI (PHYSICS) (PHY-8006954 A02)*; 12 MONTHS \$120,000

STATE UNIVERSITY AT BUFFALO

DIMOCK, JONATHAN D; *SELECTED TOPICS IN MATHEMATICAL QUANTUM FIELD THEORY (PHYSICS) (PHY-8204399)*; 24 MONTHS \$27,251

STATE UNIVERSITY AT STONY BROOK

PAUL, PETER, AND SPROUSE, GENE D; *DEVELOPMENT AND CONSTRUCTION OF A SUPERCONDUCTING HEAVY-ION LINEAR ACCELERATOR (PHY-7912300 A04)*; 12 MONTHS \$842,400

RAO, YI-HAN; *PHYSICAL PROPERTIES OF SUPERCONDUCTING WEAK LINKS (DMR-8006093 A04*)*; \$9,800

LEE, LINWOOD L, BRAUN-MUNZINGER, PETER, FOSSAN, DAVID B, MCGRATH, ROBERT L. AND PAUL, PETER; *OPERATION OF NUCLEAR STRUCTURE LABORATORY (PHY-8007500 A02)*; 12 MONTHS \$725,000

LEE, LINWOOD L; *OPERATION OF NUCLEAR STRUCTURE LABORATORY (PHY-8007500 A03)*; \$75,780

LEE-FRANZINI, JULIET, AND MC CARTHY, ROBERT L; *EXPERIMENTAL HADRON, PHOTON, AND LEPTON RESEARCH USING SPECTROMETERS (PHY-8016899 A02)*; 12 MONTHS \$280,000

YANG, CHEN NING; *THEORETICAL PHYSICS (PHY-8109110 A01)*; 12 MONTHS \$272,943

GOOD, MYRON L; *EXPERIMENTAL HIGH ENERGY PHYSICS (PHY-8114203 A01)*; 13 MONTHS \$490,000

METCALF, HAROLD; *ADVANCED TECHNIQUES IN ATOMIC PHYSICS (PHY-8203705)*; 12 MONTHS \$103,000

MCCOY, BARRY, AND PERK, JACQUES H H; *STATISTICAL MECHANICAL AND QUANTUM FIELD THEORY MODELS (DMR-8206390*)*; 12 MONTHS \$7,000

YANG, CHEN NING; *ELEMENTARY PARTICLE PHYSICS (PHY-8206592)*; 12 MONTHS \$68,053

SYRACUSE UNIVERSITY

GOLDBERG, MARVIN, HORWITZ, NAHMIN, AND MONETI, GIANCARLO; *EXPERIMENTAL ELEMENTARY PARTICLE PHYSICS (PHY-7927139 A02)*; 12 MONTHS \$305,200

ASHTOKAR, ABHAY; *QUANTUM GENERAL RELATIVITY (PHY-8008155 A02)*; 12 MONTHS \$40,108

KALOGEROPOULOS, T E; *EXPERIMENTAL ELEMENTARY PARTICLE PHYSICS (PHY-8105108 A01)*; 12 MONTHS \$130,745

BERGMANN, PETER G. AND GOLDBERG, JOSHUA N; *RESEARCH IN GENERAL GRAVITY (PHYSICS) (PHY-8209355)*; 12 MONTHS \$39,831

UNIVERSITY OF ROCHESTER

THORNDIKE, EDWARD H. AND LOBKOWICZ, FREDERICK; *ELECTROMAGNETIC INTERACTIONS OF HADRONS (PHY-7922078 A02)*; 12 MONTHS \$325,000

THORNDIKE, EDWARD H. AND LOBKOWICZ, FREDERICK; *ELECTROMAGNETIC INTERACTIONS OF HADRONS (PHYSICS) (PHY-7922078 A03)*; \$40,000

GOVE, HARRY E; *OPERATION OF THE NUCLEAR STRUCTURE RESEARCH LABORATORY (PHY-7923307 A02)*; 12 MONTHS \$940,000

DOUGLASS, DAVID H. AND JOHNSON, WARREN W; *EXPERIMENTAL STUDIES OF GRAVITATION (PHY-8008896 A02)*; 12 MONTHS \$270,000

DOUGLASS, DAVID H. AND JOHNSON, WARREN W; *EXPERIMENTAL STUDIES OF GRAVITATION (PHY-8008896 A03)*; \$30,000

OLSEN, STEPHEN L. AND ELMORE, DAVID; *PHYSICS EQUIPMENT TO SEARCH FOR FRACTIONALLY CHARGED IONS (PHY-8119345)*; 12 MONTHS \$28,800

FERBEL, THOMAS; *NATO ADVANCED STUDY INSTITUTE ON THE TECHNIQUES AND CONCEPTS OF HIGH ENERGY PHYSICS, LAKE GEORGE, NEW YORK (PHY-8204021)*; 12 MONTHS \$5,000

MANDEL, LEONARD; *COHERENCE EFFECTS IN QUANTUM OPTICS (PHY-8204338)*; 12 MONTHS \$93,000

NORTH CAROLINA

NORTH CAROLINA STATE UNIVERSITY AT RALEIGH

MOWAT, J RICHARD; *INNER-SHELL PROCESSES IN MULTIPLY IONIZED ATOMS (PHY-8018673 A01)*; 12 MONTHS \$44,058

CHUNG, KWONG T; *APPLICATION OF THE SADDLE POINT TECHNIQUE TO THE CALCULATION OF ATOMIC PROPERTIES (PHYSICS) (PHY-8206490)*; 24 MONTHS \$50,000

RISLEY, JOHN S; *FUNDAMENTAL STUDIES IN ATOMIC COLLISIONS (PHYSICS) (PHY-8208905)*; 12 MONTHS \$57,700

UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL

YORK, JAMES W; *FUNDAMENTAL PROBLEMS AND NEW APPLICATIONS OF GENERAL RELATIVITY (PHY-8011298 A02)*; 12 MONTHS \$56,169

DEPRISTO, ANDREW E. AND BAER, TOMAS; *STATE-TO-STATE CHARGE TRANSFER CROSS SECTIONS (PHYSICS) (PHY-8106958 A01)*; 12 MONTHS \$62,000

FRAMPTON, PAUL H. AND VAN DAM, HENDRICK; *THIRD WORKSHOP ON GRAND UNIFICATION; CHAPEL HILL, NORTH CAROLINA; APRIL 15-17, 1982 (PHY-8120284)*; 6 MONTHS \$2,000

OHIO

CASE WESTERN RESERVE UNIVERSITY

BROWN, ROBERT W; *THEORETICAL ELEMENTARY PARTICLE PHYSICS (PHY-8008548 A01)*; 24 MONTHS \$49,674

ROBINSON, DONALD K. AND PICKINGER, WILLIAM J; *EXPERIMENTAL HIGH ENERGY PHYSICS (PHY-8020418 A01)*; 12 MONTHS \$121,794

KOWALSKI, KENNETH L; *THEORY OF NUCLEAR INTERACTIONS (PHY-8121856)*; 12 MONTHS \$81,000

BENADE, ARTHUR H; *ACOUSTICAL STUDIES OF WIND INSTRUMENTS (PHYSICS) (PHY-8204174)*; 12 MONTHS \$73,100

KENT STATE UNIVERSITY

MADEY, RICHARD, ANDERSON, BRYON D. AND WATSON, JOHN W; *NEUTRONS FROM INTERACTIONS OF MEDIUM-ENERGY PARTICLES WITH NUCLEI (PHY-8200562)*; 12 MONTHS \$115,000

MADEY, RICHARD: NEUTRONS FROM INTERACTIONS OF MEDIUM-ENERGY PARTICLES WITH NUCLEI (PHYSICS) (PHY-8200562 A01); \$21,750

OBERLIN COLLEGE

WARNER, ROBERT E. NUCLEAR REACTION STUDIES IN LIGHT NUCLEI (PHY-8001978 A01); 12 MONTHS \$17,200
HILBORN, ROBERT C. COLLISIONAL AND HIGH-IRRADIANCE EFFECTS IN NEAR-RESONANT LASER LIGHT SCATTERING FROM ATOMS (PHY-8016501 A01); 12 MONTHS \$24,205

OHIO STATE UNIVERSITY

BOYD, RICHARD N. AND DONOGHUE, TIMOTHY R. NUCLEAR PHYSICS AT LOW AND INTERMEDIATE ENERGIES, INCLUDING INVESTIGATIONS OF FUNDAMENTAL SYMMETRIES AND NUCLEAR ASTROPHYSICS (PHY-8201699); 12 MONTHS \$300,000

BOYD, RICHARD N. AND DONOGHUE, TIMOTHY R. NUCLEAR PHYSICS AT LOW AND INTERMEDIATE ENERGIES, INCLUDING INVESTIGATIONS OF FUNDAMENTAL SYMMETRIES AND NUCLEAR ASTROPHYSICS (PHY-8201699 A01); \$90,000

GERLACH, ULRICH: WAVE DYNAMICS IN CURVED AND IN FLAT SPACE-TIMES (PHY-8205671); 24 MONTHS \$28,000

OHIO UNIVERSITY

RAPAPORT, JACOBO, AND FINLAY, ROGER W. ISOSPIN AND GIANT RESONANCE EFFECTS IN NEUTRON SCATTERING AND NEUTRON-INDUCED CHARGED-PARTICLE REACTIONS (PHY-8108456 A01); 12 MONTHS \$115,000

RAPAPORT, JACOBO. THE CHARGE-EXCHANGE REACTION AT INTERMEDIATE ENERGIES (PHY-8120594); 12 MONTHS \$33,400

UNIVERSITY OF CINCINNATI

NUSSBAUM, MIRKO M. HIGH ENERGY PHYSICS EXPERIMENT AT THE STANFORD LINEAR ACCELERATOR CENTER (PHY-8206965); 12 MONTHS \$20,000

MEADOWS, BRIAN T. AND ENDORF, ROBERT J. HIGH ENERGY PHYSICS EXPERIMENT AT STANFORD LINEAR ACCELERATOR CENTER, BROOKHAVEN NATIONAL LABORATORY, AND FERMI NATIONAL ACCELERATOR CENTER (PHY-8209144); 12 MONTHS \$41,000

OKLAHOMA

UNIVERSITY OF OKLAHOMA NORMAN CAMPUS

GOLDEN, DAVID E. EXPERIMENTAL DETERMINATION OF SCATTERING AMPLITUDES AND RELATIVE PHASES IN ELECTRON IMPACT EX-CITATION OF ALKALI ATOMS (PHY-8115561); 12 MONTHS \$104,249

OREGON

OREGON STATE UNIVERSITY

SWENSON, L. W. COLLABORATIVE RESEARCH ON NUCLEAR PHYSICS AT INTERMEDIATE ENERGIES (PHY-7926303 A02); 12 MONTHS \$75,942

UNIVERSITY OF OREGON - EUGENE

MC DANIELS, DAVID K. COLLABORATIVE RESEARCH ON NUCLEAR PHYSICS AT INTERMEDIATE ENERGIES (PHY-7923656 A02); 12 MONTHS \$57,744

LEFEVRE, HARLAN W. DEVELOPMENT OF NUCLEAR TECHNIQUES AND INSTRUMENTS - PLASMA LENS, ION MICROSCOPE, ION INDUCED ACOUSTIC WAVES, FAST NEUTRON TOMOGRAPHY (PHY-8100214 A01); 12 MONTHS \$106,750

CRASEMANN, BERND. INTERNATIONAL CONFERENCE ON X-RAY AND ATOMIC INNER-SHELL PHYSICS; EUGENE, OREGON; AUGUST 23-27, 1982 (PHY-8114742); 12 MONTHS \$7,000

PENNSYLVANIA

DREXEL UNIVERSITY

GILMORE, ROBERT, AND FENG, DA HSUAN; BOSON STATES IN NUCLEI AND NEUTRON TRANSFER REACTIONS (PHY-8102977 A01); \$18,325

HAYERFORD COLLEGE

PARTRIDGE, R. B. DETAILED INVESTIGATION OF THE COSMIC MICROWAVE BACKGROUND-IMPLICATIONS FOR COSMOLOGY (AST-8007370 A01)*; 12 MONTHS \$9,300

PENNSYLVANIA STATE UNIVERSITY

PAGE, DON N. BLACK HOLES, QUANTUM GRAVITY, AND COSMOLOGY (PHY-8117464); 24 MONTHS \$26,000

UNIVERSITY OF PENNSYLVANIA

MIDDLETON, ROY. NUCLEAR RESEARCH WITH TANDEM ACCELERATOR (PHY-7922019 A03); 12 MONTHS \$900,300

MIDDLETON, ROY. NUCLEAR RESEARCH WITH TANDEM ACCELERATOR (PHYSICS) (PHY-7922019 A04)*; \$24,750

LANDE, KENNETH. COSMIC RAY TELESCOPE (PHY-8121460); 12 MONTHS \$152,500

AMADO, RALPH D. AND PRIMAKOFF, HENRY. VARIOUS TOPICS IN THEORETICAL PHYSICS (PHY-8203969); 24 MONTHS \$355,000

UNIVERSITY OF PITTSBURGH

AUSTERN, NORMAN, TABAKIN, FRANK, AND VINCENT, C. MARTIN. THEORETICAL STUDIES OF NUCLEAR STRUCTURE AND NUCLEAR RE-ACTIONS (PHY-7920762 A02); 12 MONTHS \$132,312

VINCENT, C. MARTIN, AUSTERN, NORMAN, AND TABAKIN, FRANK. THEORETICAL STUDIES OF NUCLEAR STRUCTURE AND NUCLEAR RE-ACTIONS (PHY-7920762 A03); \$6,978

COHEN, BERNARD L. DAHNICK, WILFRIED W. SALADIN, JURG X. MAIER, JAMES V. AND SAYLOR, TILLMAN K. NUCLEAR STRUCTURE

NUCLEAR REACTIONS, AND APPLICATIONS OF NUCLEAR SCIENCE (PHY-7921108 A03); 12 MONTHS \$667,000

JANIS, ALLEN I. NEWMAN, EZRA T. AND WINICOUR, JEFFREY H. RADIATION PROBLEMS IN GENERAL RELATIVITY (PHY-8008232 A01); 12 MONTHS \$82,997

NEWMAN, EZRA T. AND HSIEH, S. H. YANG-MILLS THEORIES OF GRAVITATION (PHY-8010715 A02); 5 MONTHS \$14,886

ROSKIES, RALPH Z. CARLITZ, ROBERT D. AND DUNCAN, H. ANTHONY. INVESTIGATIONS IN ELEMENTARY PARTICLE PHYSICS (PHY-8024638 A01); 12 MONTHS \$104,456

SPARLING, GEORGE A. J. TWISTORS, SHEAVES AND TOPOS THEORY: AN INVESTIGATION OF THEIR COMMON LINKS (MATHEMATICAL PHYSICS) (PHY-8117926); 12 MONTHS \$28,132

PRATT, RICHARD H. THEORY OF QUANTUM ELECTRODYNAMIC PROC-ESSES IN THE FIELD OF AN ATOM (PHY-8120785); 12 MONTHS \$54,238

BAYFIELD, JAMES E. AND STEHLE, PHILIP. ATOMIC PROCESSES IN STRONG ELECTROMAGNETIC FIELDS (PHYSICS) (PHY-8206706); 12 MONTHS \$95,000

RHODE ISLAND

AMERICAN MATHEMATICAL SOCIETY

LEVEQUE, WILLIAM J. AND SALLY, PAUL J. SUMMER SEMINAR ON APPLICATIONS OF GROUP THEORY IN PHYSICS AND MATHEMATICAL PHYSICS; CHICAGO, ILLINOIS; JULY 6-16, 1982 (MATHEMATICAL SCI-ENCES) (MCS-8208734*); 12 MONTHS \$4,000

GORDON RESEARCH CONFERENCES

CRUICKSHANK, ALEXANDER M. NUCLEAR STRUCTURE GORDON CONFERENCE; NEW LONDON, NEW HAMPSHIRE; JUNE 28-JULY 2, 1982 (PHY-8205874); 6 MONTHS \$8,000

CRUICKSHANK, ALEXANDER M. GORDON RESEARCH CONFERENCE ON PHOTONUCLEAR REACTIONS NEW LONDON, N.H.; AUGUST 9-13, 1982 (PHY-8209806); 6 MONTHS \$5,500

SOUTH CAROLINA

UNIVERSITY OF SOUTH CAROLINA AT COLUMBIA

FREEDOM, BARRY M. STUDY OF NUCLEAR PHYSICS WITH INTERME-DIATE ENERGY PROBES (PHY-8006086 A02); 12 MONTHS \$140,000

AVIGNONE, FRANK T. ACCURATE MEASUREMENT OF SOME FEAT-URES OF ATOMIC STRUCTURE (PHY-8109038 A01); 12 MONTHS \$14,000

MYHRER, FRED. THEORETICAL STUDIES OF QUARK DEGREES OF FREEDOM IN NUCLEI (PHY-8201910); 36 MONTHS \$41,000

FREEDOM, BARRY M. ACQUISITION OF COMPUTER SYSTEM TO AID IN THE STUDY OF NUCLEAR PHYSICS WITH INTERMEDIATE ENERGY PROBES (PHY-8206756); 12 MONTHS \$81,694

AVIGNONE, FRANK T. ULTRASENSITIVE INVESTIGATION OF NEU-TRINOLESS AND TWO NEUTRINO DOUBLE BETA DECAY OF ⁷⁶Ge (PHY-8209562*); 12 MONTHS \$20,000

TENNESSEE

UNIVERSITY OF TENNESSEE AT KNOXVILLE

BREINIG, MARIANNE, AND SELLIN, IVAN A. ATOM CAPTURE AND LOSS AT ASYMPTOTICALLY HIGH VELOCITIES (PHYSICS) (PHY-8108465 A01); 12 MONTHS \$71,500

SELLIN, IVAN A. ELSTON, STUART B. AND BREINIG, MARIANNE. HIGH-VELOCITY COLLISIONS OF HIGHLY IONIZED IONS WITH ATOMS, MOLECULES AND SOLIDS (PHYSICS) (PHY-8204416); 12 MONTHS \$140,000

VANDERBILT UNIVERSITY

PANVINI, ROBERT S. ELEMENTARY PARTICLE PHYSICS (PHY-7923277 A03); 12 MONTHS \$175,000

PANVINI, ROBERT S. ELEMENTARY PARTICLE PHYSICS (PHY-7923277 A04); \$6,200

ROOS, CHARLES E. AND WEBSTER, MEDFORD S. MULTIPARTICLE SPECTROMETER STUDIES OF CHARM AND BEAUTY (PHY-8121161); 12 MONTHS \$190,495

PANVINI, ROBERT S. FIFTH INTERNATIONAL CONFERENCE ON HIGH ENERGY PHYSICS (NOVEL RESULTS IN PARTICLE PHYSICS); NASH-VILLE, TENNESSEE (PHY-8209822); 6 MONTHS \$2,500

TEXAS

NORTH TEXAS STATE UNIVERSITY

DUGGAN, JEROME L. SEVENTH CONFERENCE ON THE APPLICATION OF ACCELERATORS IN RESEARCH AND INDUSTRY; DENTON, TEXAS; NOVEMBER 1-3, 1982 (29Y-8120733*); 12 MONTHS \$2,000

RICE UNIVERSITY

WELLS, R. O. COMPLEX DIFFERENTIAL GEOMETRY AND MATHEMAT-ICAL PHYSICS (MCS-8104237 A01)*; 12 MONTHS \$5,754

STEBBINGS, RONALD F. AND DUNNING, F. B. COLLISIONS INVOLVING ATOMS IN HIGH RYDBERG STATES (PHYSICS) (PHY-8108452 A02); 12 MONTHS \$138,000

TEXAS A & M UNIVERSITY

READING, JOHN F. AND FORD, ALBERT L. THEORETICAL STUDIES OF ION-ATOM COLLISIONS (PHY-7909146 A01); 24 MONTHS \$40,000

FULLING, STEPHEN A. QUANTUM FIELD THEORY IN CURVED SPACE-TIME AND ITS MATHEMATICAL FOUNDATIONS (PHY-7915229 A01); 24 MONTHS \$27,577

SIEMENS, PHILIP J. AND KO, CHE-MING. THEORETICAL NUCLEAR PHYSICS (PHY-8109019 A01); 12 MONTHS \$110,500

CHURCH, DAVID A. ANISOTROPY IN ION COLLISION EXCITATION (ATOMIC PHYSICS) (PHY-8205872); 12 MONTHS \$60,467

SMITH, ROGER; *THEORY OF MANY-BODY SYSTEMS (PHYSICS) (PHY-8206325); 24 MONTHS \$50,000*
 ERNST, DAVID J; *NUCLEAR THEORY (PHY-8206849); 12 MONTHS \$25,000*
 SCHUESSLER, HANS A; *STORED ION STUDIES OF SPIN DEPENDENCE IN ION-ATOM COLLISIONS AND OF THE ENERGY LEVELS OF SIMPLE IONS (PHYSICS) (PHY-8206960); 12 MONTHS \$73,500*

UNIV OF TEXAS AT ARLINGTON

COLEMAN, PAUL G; *POSITRON SCATTERING STUDIES EMPLOYING TIME-OF-FLIGHT SPECTROMETRY (PHYSICS) (PHY-8018475 A01); 12 MONTHS \$51,013*

COLEMAN, PAUL G, SHARMA, SURESH C, AND DIANA, LEONARD M; *THE SIXTH INTERNATIONAL CONFERENCE ON POSITRON ANNIHILATION: ARLINGTON, TEXAS, APRIL 3-7, 1982 (DMR-8113227*); 12 MONTHS \$3,000*

UNIV OF TEXAS AT AUSTIN

DEWITT, BRYCE S; *RESEARCH ON THE ROLE OF GRAVITATION IN PHYSICS (PHY-8022199 A01); 12 MONTHS \$60,639*

MATZNER, RICHARD A, AND DEWITT-MORETTE, CECILE; *PROBLEMS IN RELATIVITY AND PATH INTEGRATION (PHYSICS) (PHY-8107381 A01); 12 MONTHS \$50,076*

WHEELER, JOHN A, AND CANDELAS, PHILIP; *SPACETIME PHYSICS (PHY-8205717); 12 MONTHS \$65,655*

UNIV OF TEXAS AT DALLAS

COLLINS, CARL B; *INVESTIGATION OF THE DISSOCIATIVE ELECTRONIC STATES OF SIMPLE MOLECULES (PHY-8019525 A01); 12 MONTHS \$48,600*

COLLINS, CARL B; *THE INVESTIGATION OF THE DISSOCIATIVE ELECTRONIC STATES OF SIMPLE MOLECULES (PHYSICS) (PHY-8019525 A03); \$49,440*

COLLINS, CARL B; *THE THIRTY-FIFTH GASEOUS ELECTRONICS CONFERENCE, RICHARDSON, TEXAS, OCTOBER 19-22, 1982 (29Y-8207069); 12 MONTHS \$5,000*

UTAH

UNIVERSITY OF UTAH

LOH, EUGENE C, AND GROOM, DONALD E; *LEPTONIC PROCESSES AT PEP (PHY-8006504 A02); 12 MONTHS \$98,900*

BALL, JAMES S, AND DETAR, CARLETON E; *RESEARCH IN HIGH ENERGY THEORETICAL PHYSICS (PHY-8008249 A01); 12 MONTHS \$34,032*

KUCHAR, KAREL V, AND PRICE, RICHARD H; *QUANTUM GRAVITY AND RELATIVISTIC ASTROPHYSICS (PHY-8106909 A01); 12 MONTHS \$72,000*

CASSIDAY, GEORGE L, AND LOH, EUGENE C; *A COSMIC RAY OBSERVATORY FOR ULTRA-HIGH ENERGY PROCESSES (PHY-8201089); 12 MONTHS \$630,000*

UTAH STATE UNIVERSITY

LIND, V G; *PION DEEP INELASTIC AND ABSORPTION REACTIONS IN NUCLEI (PHY-8010838 A02); \$8,000*

LIND, V G; *PION DEEP INELASTIC AND ABSORPTION REACTIONS IN NUCLEI (PHYSICS) (PHY-8010838 A03); 12 MONTHS \$49,421*

VIRGINIA

COLLEGE OF WILLIAM AND MARY

ECKHAUSE, MORTON, KANE, JOHN R, SIEGEL, ROBERT T, AND WELSH, ROBERT E; *INTERACTIONS OF MUONS, KAONS, ANTIPROTONS, AND SIGMA HYPERONS (PHY-7923802 A02); 12 MONTHS \$260,000*

ECKHAUSE, MORTON, SIEGEL, ROBERT T, KANE, JOHN R, AND WELSH, ROBERT E; *INTERACTIONS OF MUONS, KAONS, ANTIPROTONS AND SIGMA HYPERONS (PHY-7923802 A03); \$29,463*

PERDRISAT, CHARLES F; *LIGHT NUCLEI INVESTIGATED WITH MEDIUM ENERGY PROJECTILES (PHY-8203531); 12 MONTHS \$39,000*

OLD DOMINION UNIVERSITY

HAVEY, MARK D; *SPECTROSCOPY OF LI-RARE GAS MOLECULES (PHYSICS) (PHY-8107114 A01); 12 MONTHS \$20,621*

UNIVERSITY OF VIRGINIA

KELLY, HUGH P; *MANY-BODY METHODS WITH APPLICATIONS TO ATOMS AND MOLECULES (PHYSICS) (PHY-7908241 A03); 12 MONTHS \$58,313*

RITTER, ROGERS C; *PRECISION MECHANICAL REACTIONS FOR FUNDAMENTAL EXPERIMENTS (PHYSICS) (PHY-8007948 A01); 12 MONTHS \$33,629*

LARSON, DANIEL J; *STORED ATOM RESEARCH (PHY-8021055 A02); 12 MONTHS \$88,000*

ZIOCK, KLAUS O; *A SEARCH FOR FRACTIONALLY CHARGED PARTICLES (PHYSICS) (PHY-8022361 A01); 6 MONTHS \$3,493*

MCCARTHY, JAMES S, NOBLE, JULIAN V, AND WHITNEY, R R; *CONFERENCE ON ELECTRON PHYSICS AND ACCELERATORS - THE NEXT GENERATION, CHARLOTTESVILLE, VIRGINIA, APRIL 23 - 24, 1982 (PHY-8120837); 6 MONTHS \$5,000*

WEBER, HANS-JURG E, AND NOBLE, JULIAN V; *RESEARCH IN THEORETICAL MEDIUM ENERGY NUCLEAR PHYSICS (PHY-8200578); 12 MONTHS \$49,115*

THORNTON, STEPHEN T; *EXPERIMENTAL NUCLEAR PHYSICS RESEARCH (PHY-8205517); 12 MONTHS \$40,000*

VIRGINIA POLYTECHNIC INSTITUTE

MO, LUKE W; *HIGH ENERGY PHYSICS RESEARCH (PHY-8000241 A04); 12 MONTHS \$291,058*

MO, LUKE W; *HIGH ENERGY PHYSICS RESEARCH (PHY-8000241 A05); \$86,420*

FICENEC, JOHN R, AND TROWER, W PETER; *STUDY OF HADROPRODUCED HIGH MASS RESONANCES WITH THE FERMILAB MULTIPARTICLE SPECTROMETER (PHY-8020441 A01); 12 MONTHS \$104,000*

FICENEC, JOHN R, AND TROWER, W PETER; *STUDY OF HADROPRODUCED HIGH MASS RESONANCES WITH THE FERMILAB MULTIPARTICLE SPECTROMETER (PHYSICS) (PHY-8020441 A02); \$6,500*

FICENEC, JOHN R, AND TROWER, W PETER; *STUDY OF HADROPRODUCED HIGH MASS RESONANCES WITH THE FERMILAB MULTIPARTICLE SPECTROMETER (PHYSICS) (PHY-8020441 A03); \$2,500*

GOTOW, KAZUO, AND BLECHER, MARVIN; *WEAK INTERACTION AND LOW ENERGY PION EXPERIMENTS (PHYSICS) (PHY-8204415); 12 MONTHS \$123,000*

CHANG, LAY N; *THEORETICAL INVESTIGATIONS IN GAUGE FIELD THEORIES AND PARTICLE INTERACTIONS (PHYSICS) (PHY-8207041); 24 MONTHS \$28,338*

WASHINGTON

UNIVERSITY OF WASHINGTON

LUBATTI, HENRY J, AND BURNETT, THOMPSON H; *VISUAL TECHNIQUES IN HIGH ENERGY PHYSICS (PHY-8022207 A03); 12 MONTHS \$305,000*

LUBATTI, HENRY J; *VISUAL TECHNIQUES IN HIGH ENERGY PHYSICS (PHY-8022207 A04); \$20,000*

GEHALLE, RONALD; *ION COLLISION STUDIES (PHYSICS) (PHY-8106083 A01); 12 MONTHS \$97,000*

DEHMELT, HANS G, AND VAN DYCK, ROBERT S; *STUDIES OF PHYSICS OF SINGLE ELEMENTARY PARTICLE AT REST IN SPACE (SEPARIS) (PHY-8106842 A01); 12 MONTHS \$133,000*

WILLIAMS, R W, AND COOK, VICTOR; *ELEMENTARY PARTICLE PHYSICS USING HIGH ENERGY ACCELERATORS (PHY-8112208 A02); 12 MONTHS \$453,855*

MILLER, GERALD A, AND WILETS, LAWRENCE; *TOPICAL SUMMER RESEARCH INSTITUTE OF THEORETICAL PHYSICS: THE ROLE OF QUARKS IN NUCLEI, SEATTLE, WASHINGTON, JULY 16 - AUGUST 13, 1982 (PHY-8121909); 12 MONTHS \$5,000*

FORTSON, NORVAL; *PARITY AND TIME REVERSAL TESTS IN ATOMS (PHYSICS) (PHY-8203512); 12 MONTHS \$126,200*

VAN DYCK, ROBERT S; *MONO-ION STUDIES: PRECISION MASS RATIOS AND DIFFERENCE (PHYSICS) (PHY-8205631); 12 MONTHS \$34,300*

DEHMELT, HANS G; *SINGLE ATOMIC PARTICLE AT REST IN SPACE (SAPARIS) (PHY-8206895); 12 MONTHS \$96,520*

WISCONSIN

UNIVERSITY OF WISCONSIN-MADISON

BARGER, VERNON D, AND CLINE, DAVID B; *A THREE DAY MINI-CONFERENCE AND WORKSHOP ON FORWARD CYLINDER PHYSICS; MADISON, WISCONSIN; DECEMBER 10-12, 1981 (PHY-8121870); 12 MONTHS \$2,000*

MC VOY, KIRK W, AND FRIEDMAN, WILLIAM A; *RESEARCH IN NUCLEAR REACTION THEORY (PHY-8204302); 24 MONTHS \$205,000*

UNIVERSITY OF WISCONSIN-MILWAUKEE

PARKER, LEONARD, AND FRIEDMAN, JOHN; *RESEARCH IN GRAVITY, QUANTIZED FIELDS, AND RELATIVISTIC ASTROPHYSICS (PHY-8104461 A01); 12 MONTHS \$53,129*

MATERIALS RESEARCH

ALABAMA

UNIVERSITY OF ALABAMA

STRALEY, JOSEPH P; *COOPERATIVE PHENOMENA IN THE ELECTRICAL CONDUCTIVITY OF COMPOSITE MATERIALS (DMR-8114797); 12 MONTHS \$25,900*

ARIZONA

ARIZONA STATE UNIVERSITY

SHAW, MILTON C; *THE ROLE OF ADHESION IN THE WEAR OF REFRACTORY ABRASIVE PARTICLES (DMR-7919820 A02); 12 MONTHS \$20,200*

GLAUNSINGER, WILLIAM S; *STRUCTURE AND PROPERTIES OF METAL-AMMONIA COMPOUNDS (DMR-7921069 A02); 13 MONTHS \$113,200*

COWLEY, JOHN M; *SHORT RANGE ORDERING STUDIES USING SCANNING TRANSMISSION ELECTRON MICROSCOPY (DMR-7926460 A02); 12 MONTHS \$97,000*

COWLEY, JOHN M; *ELECTRON MICROSCOPY OF ATOM CONFIGURATIONS OF SURFACES AND DEFECTS IN CRYSTALS (DMR-8015785 A03); 12 MONTHS \$55,000*

NAVROTSKY, ALEXANDRA; *SILICATE GLASSES AND MELTS: THERMOCHEMICAL STUDIES (EAR-8022223 A01*); 12 MONTHS \$25,000*

EYRING, LEROY, AND LIN, SHENG H; *STRUCTURE, DEFECTS, AND CHEMICAL REACTION IN THE SOLID STATE: HIGH-RESOLUTION TRANSMISSION ELECTRON MICROSCOPY AND MICROANALYSIS (DMR-8108306 A01); 12 MONTHS \$229,500*

KRIVANEK, ONDREJ L; *ATOMIC AND ELECTRONIC STRUCTURE OF SEMICONDUCTOR INTERFACES (DMR-8117052); 12 MONTHS \$74,200*

O'KEEFE, MICHAEL; *CRYSTAL CHEMISTRY (DMR-8119061); 12 MONTHS \$70,000*

PAGE, JOHN B, AND WALKER, CHARLES T; *EXPERIMENTAL AND THEORETICAL LIGHT SCATTERING STUDY OF THE ELECTRON-PHONON INTERACTION (DMR-8204586); 8 MONTHS \$55,300*

UNIVERSITY OF ARIZONA

STARK, ROYAL W; *PROPERTIES OF CONDUCTION ELECTRONS IN METALS (DMR-7910533 A02); 12 MONTHS \$63,400*

DEMER, LOUIS J.; *INDUSTRY/UNIVERSITY COOPERATIVE PROGRAM (IUC) - CORRELATION OF ELECTRICALLY-ACTIVE DEFECTS IN SILICON WAFERS WITH STRUCTURAL INHOMOGENEITIES IN AS-GROWN CRYSTALS* (DMR-7918023 A02*); 12 MONTHS \$56,000
 HALL, HENRY K.; *INTERMEDIATES IN VINYL POLYMERIZATIONS AND RELATED REACTIONS* (DMR-8106018 A01); 12 MONTHS \$57,600
 POIRIER, DAVID R.; *PERMEABILITY AND FLOW OF INTERDEPENDENT LIQUID IN SOLIDIFYING ALLOYS* (DMR-8205554); 12 MONTHS \$58,300

CALIFORNIA

CALIFORNIA INSTITUTE OF TECHNOLOGY

GODDARD, WILLIAM A.; *CHEMISORPTION AND CATALYSIS ON SOLID SURFACES USING MOLECULAR MANY-BODY TECHNIQUES* (DMR-7919689 A02); 12 MONTHS \$76,900

ZEWAIL, AHMED H.; *LASER SPECTROSCOPY (IF ORDERED AND DISORDERED SYSTEMS* (DMR-8105034 A01); 13 MONTHS \$169,800
 HOPFIELD, JOHN J.; *THEORETICAL AND EXPERIMENTAL STUDIES OF BIOLOGICAL MOLECULES AND PROCESSES* (DMR-8107494 A01*); 12 MONTHS \$66,600

COHEN, DONALD S.; *DIFFERENTIAL EQUATIONS AND CONTINUUM MECHANICS* (MCS-8205407*); 12 MONTHS \$15,000

INTERNATIONAL BUSINESS MACHINES CORPORATION-SAN JOSE RESEARCH LABORATORY

MORAWITZ, HANS; *INTERNATIONAL CONFERENCE ON VIBRATIONS AT SURFACES*; ASILOMAR, CALIFORNIA, SEPTEMBER 1-4, 1982 (29R-8200835*); 12 MONTHS \$4,000

LINUS PAULING INST OF SCIENCE & MEDICINE

PAULING, LINUS; *THE STRUCTURE OF MOLECULES AND CRYSTALS AND THE NATURE OF THE CHEMICAL BOND* (DMR-8012728 A02); 6 MONTHS \$29,800

NAVAL POSTGRADUATE SCHOOL

PERKINS, JEFF; *MARTENSITIC TRANSFORMATIONS IN SHAPE MEMORY ALLOYS* (DMR-8108407 A01); 12 MONTHS \$50,700

ROCKWELL INTERNATIONAL CORPORATION

CLARKE, DAVID R.; *INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: THERMODYNAMIC PARAMETERS RELATING PHASE RETENTION AND MICROCRACKING IN CERAMICS* (DMR-8007445 A03*); 12 MONTHS \$40,300

SAN DIEGO STATE UNIVERSITY

SHORE, HERBERT B.; *THEORETICAL STUDIES OF INHOMOGENEOUS ELECTRONIC SYSTEMS IN SOLIDS* (DMR-7920813 A02); 12 MONTHS \$32,500
 SWEEDLER, ALAN R.; *IRRADIATION OF SUPERCONDUCTING COMPOUNDS* (DMR-8026100 A01); 12 MONTHS \$29,100

SAN JOSE STATE UNIVERSITY

ACRIVOS, JUANA V.; *INTERCALATION AND TRANSPORT PROPERTIES OF LAYER SOLIDS* (DMR-7910011 A03); 12 MONTHS \$42,800

SRI INTERNATIONAL

ROWCLIFFE, DAVID J. AND SINCLAIR, ROBERT; *DEFORMATION AND FRACTURE OF CEMENTED CARBIDES* (DMR-8109298 A01); 12 MONTHS \$138,200

STANFORD UNIVERSITY

GIBBONS, JAMES F.; *ION IMPLANTATION AND LASER ANNEALING IN SEMICONDUCTORS AND RELATED MATERIALS* (DMR-7819970 A03); 6 MONTHS \$25,100

LINDAU, INGOLF; *THE ENERGY DEPENDENCE OF PARTIAL PHOTOIONIZATION CROSS SECTIONS IN THE SOFT X-RAY REGION* (DMR-7913102 A03); 6 MONTHS \$19,900

FRANK, CURTIS W.; *EXCIMER FLUORESCENCE AS A MOLECULAR PROBE OF COMPATIBILITY AND RELAXATION BEHAVIOR IN SOLID POLYMER BLENDS* (DMR-7916477 A03); 12 MONTHS \$58,900

FAYER, MICHAEL D.; *EXCITED STATE DYNAMICS IN MOLECULAR SOLIDS* (DMR-7920380 A02); 12 MONTHS \$89,100

FAYER, MICHAEL D.; *EXCITED STATE DYNAMICS IN MOLECULAR SOLIDS* (DMR-7920380 A03); \$87,700

LITTLE, WILLIAM A.; *ORGANIC AND ORGANO-METALLIC CONDUCTORS AND SUPERCONDUCTORS* (DMR-8002457 A02); 12 MONTHS \$90,000

FLORY, PAUL J.; *MOLECULAR CONFORMATION AND SPATIAL CONFIGURATIONS OF POLYMER CHAINS* (DMR-8006624 A02); 12 MONTHS \$89,200

LITTLE, WILLIAM A.; *MICROPHYSICAL TECHNIQUES FOR THE CHARACTERIZATION OF SOLIDS* (DMR-8007655 A01); 12 MONTHS \$50,000

DONIACH, SEBASTIAN, AND HUBERMAN, B. A.; *INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: THEORY OF COOPERATIVE PHENOMENA IN SUPERFLUID SYSTEMS OF REDUCED DIMENSIONALITY* (DMR-8007934 A02*); 12 MONTHS \$26,500

GEBALLE, THEODORE H.; *MATERIALS RESEARCH LABORATORY PROGRAM* (DMR-8020248 A02); 12 MONTHS \$2,000,000

GEBALLE, THEODORE H.; *MATERIALS RESEARCH LABORATORY PROGRAM* (DMR-8020248 A03); \$50,000

HARRISON, WALTER A. AND HERRING, W. CONYERS; *PSEUDOPOTENTIAL METHODS IN PHYSICS* (DMR-8022365 A01); 12 MONTHS \$61,800

EVERITT, CHARLES W. AND CABRERA, BLAS; *PRECISE DETERMINATIONS OF H/M IN ROTATING SUPERCONDUCTING RINGS* (DMR-8026007 A01*); 12 MONTHS \$40,000

LINDAU, INGOLF; *INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH: RELATIONSHIP OF ATOMIC AND ELECTRONIC STRUCTURE OF SEMI-CONDUCTOR SURFACES AND INTERFACES* (DMR-8108343*); 6 MONTHS \$110,000

BEASLEY, MALCOLM R.; *TWO-DIMENSIONAL SUPERCONDUCTIVITY AND LAYERED SUPERCONDUCTING STRUCTURES* (DMR-8109583 A01); 12 MONTHS \$57,000

BIENENSTOCK, ARTHUR I.; *OPERATION OF THE STANFORD SYNCHROTRON RADIATION LABORATORY* (DMR-8112343); 9 MONTHS \$4,200,000

BIENENSTOCK, ARTHUR I.; *OPERATION OF THE STANFORD SYNCHROTRON RADIATION LABORATORY* (DMR-8112343 A01); 3 MONTHS \$1,200,000

FETTER, ALEXANDER L.; *QUANTUM FLUIDS AND SOLIDS* (DMR-8118386); 12 MONTHS \$62,900

NIX, WILLIAM D.; *ACQUISITION OF AN INTEGRATED MECHANICAL TESTING FACILITY* (DMR-8121430); 12 MONTHS \$40,000

NIX, WILLIAM D.; *TIME DEPENDENT PLASTIC FLOW IN METALS AND ALLOYS* (DMR-8203530); 12 MONTHS \$69,200

BIENENSTOCK, ARTHUR I.; *STRUCTURAL STUDIES OF AMORPHOUS MATERIALS* (DMR-8205401); 12 MONTHS \$58,900

UNIVERSITY OF CALIFORNIA, BERKELEY

COHEN, MARVIN L. AND LOUIE, STEVEN G.; *THEORETICAL SOLID STATE PHYSICS* (DMR-7822465 A03); 12 MONTHS \$133,500

YU, PETER Y.; *STUDY OF INTRINSIC AND EXTRINSIC PROPERTIES OF SEMICONDUCTORS BY RESONANT RAMAN AND BRILLOUIN SPECTROSCOPES* (DMR-7919463 A02); 12 MONTHS \$55,000

DE FONTAINE, DIDIER; *CLUSTERING AND ORDERING INSTABILITIES IN MULTICOMPONENT SYSTEMS* (DMR-7920405 A03); 12 MONTHS \$102,900

HAHN, ERWIN L.; *COHERENT OPTICAL PHENOMENA AND SOLID STATE SPIN-RESONANCE* (DMR-8018211 A01); 12 MONTHS \$116,000

THOMAS, GARETH; *HIGH RESOLUTION ELECTRON MICROSCOPY OF NITROGEN CERAMICS - FUNDAMENTAL STUDIES* (DMR-8023461 A01); 12 MONTHS \$80,000

FALICOV, LEOPOLD M.; *THEORETICAL RESEARCH ON THE ELECTRONIC PROPERTIES OF SOLIDS* (DMR-8106494 A01); 12 MONTHS \$50,000

KNIGHT, WALTER D.; *METAL MICROCLUSTERS IN BEAMS* (DMR-8115540*); 12 MONTHS \$80,900

SHEN, Y. R.; *LINEAR AND NONLINEAR OPTICAL EFFECTS IN LIQUID CRYSTALS* (DMR-8117368); 12 MONTHS \$39,400

PACKARD, RICHARD E.; *ULTRALOW TEMPERATURE PHYSICS* (DMR-8119542); 10 MONTHS \$100,000

HALLER, EUGENE E.; *IMPURITY COMPLEXES IN ULTRA-PURE SEMI-CONDUCTORS* (DMR-8203430); 12 MONTHS \$68,000

UNIVERSITY OF CALIFORNIA, DAVIS

MUKHERJEE, AMIYA K.; *MECHANICAL AND MICROSTRUCTURAL ASPECTS IN SUPERPLASTICITY AND CREEP* (DMR-7727724 A04); 12 MONTHS \$68,400

MUNIR, ZUHAI; *TRANSIENT EVAPORATION OF IONIC CRYSTALS* (DMR-7909020 A03); 12 MONTHS \$76,000

SHACKELFORD, JAMES F.; *INTERSTITIAL STRUCTURE OF AMORPHOUS SOLIDS* (DMR-8204394); 12 MONTHS \$59,600

UNIVERSITY OF CALIFORNIA, IRVINE

WALLIS, RICHARD F. AND MARADUDIN, ALEXEI A.; *THEORETICAL INVESTIGATIONS OF SURFACE EFFECTS IN SOLIDS AND THE PROPERTIES OF SEMICONDUCTORS* (DMR-7809430 A03); 6 MONTHS \$55,000

RUTLEDGE, JAMES E.; *THE LOW TEMPERATURE THERMAL PROPERTIES OF DISORDERED GERMANIUM AND SILICON FILMS* (DMR-8009318 A02); 12 MONTHS \$38,000

MOHAMED, FARGHALLI A.; *CREEP BEHAVIOR UNDER VERY LOW STRESSES* (DMR-8025820 A02); 12 MONTHS \$55,700

UNIVERSITY OF CALIFORNIA, LOS ANGELES

WAGNER, C. N.; *THE STRUCTURE OF LIQUID AND AMORPHOUS METALLIC ALLOYS AND THE STRUCTURAL RELAXATION OF METALLIC GLASSES* (DMR-8007939 A03); 12 MONTHS \$80,000

NICOL, MALCOLM F.; *STRUCTURES AND DYNAMICS OF SOLIDS UNDER HIGH PRESSURES AND OTHER EXTREME CONDITIONS* (DMR-8025620 A01); 12 MONTHS \$109,300

WILLIAMS, GARY A.; *TWO-DIMENSIONAL TRANSITIONS AT THE SURFACE OF LIQUID HELIUM* (DMR-8100218 A01); 12 MONTHS \$57,000

CLARK, W. G. AND GRUNER, GEORGE; *STATIC AND DYNAMIC MAGNETIC PROPERTIES OF UNIFORM AND DISORDERED QUASI ONE-DIMENSIONAL CONDUCTORS* (DMR-8103085 A02*); 12 MONTHS \$126,400

ARDELL, ALAN J.; *DISLOCATION ANNIHILATION AND HIGH TEMPERATURE MECHANICAL BEHAVIOR* (DMR-8111133 A01); 12 MONTHS \$66,300

CHAIKIN, PAUL M.; *INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: ORGANIC CHARGE-TRANSFER SALTS* (DMR-8115241*); 12 MONTHS \$76,300

HOLSTEIN, THEODORE D. ORBACH, RAYMOND L. AND PINCUS, PHILIP A.; *SOME THEORETICAL STUDIES OF THE PROPERTIES OF CONDENSED MATTER* (DMR-8115542); 12 MONTHS \$144,000

ORBACH, RAYMOND L. AND GRUNER, GEORGE; *EXCITATION DYNAMICS OF RANDOM SYSTEMS* (DMR-8121394); 12 MONTHS \$105,000

WILLIAMS, R. STANLEY; *ION SCATTERING SPECTROSCOPY FOR SURFACE STRUCTURE ANALYSIS* (DMR-8204858*); 12 MONTHS \$35,000

UNIVERSITY OF CALIFORNIA, RIVERSIDE

POLLAK, MICHAEL; *TRANSPORT AND ELECTRONIC PROPERTIES OF DISORDERED SOLIDS* (DMR-7821959 A03); 6 MONTHS \$48,000

MACLAUGHLIN, DOUGLAS E.; *MUON SPIN ROTATION AND NUCLEAR MAGNETIC RESONANCE* (DMR-8115543); 12 MONTHS \$64,900

UNIVERSITY OF CALIFORNIA, SAN DIEGO

OESTERREICHER, HANS; *GIANT INTRINSIC MAGNETIC HARDNESS* (DMR-7920268 A02); 12 MONTHS \$44,000

SUHL, HARRY; REACTION KINETICS OVER SURFACES OF SOLIDS (DMR-792236 A02; 12 MONTHS \$74,000

MA, SHANGKENG; STATISTICAL PHYSICS (DMR-8002129 A02; 12 MONTHS \$48,000

SCHULTZ, SHELDON, AND FEHER, GEORGE; EXPERIMENTAL SOLID STATE RESEARCH (DMR-8007969 A01*; 10 MONTHS \$177,000

MAPLE, M BRIAN; INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: CORRELATIONS BETWEEN SUPERCONDUCTIVITY AND MAGNETISM THROUGH NEW TERNARY COMPOUNDS (DMR-8017723 A02*; 12 MONTHS \$25,200

SHAM, LU JEU; THEORY OF ELECTRONS AND PHONONS AT SOLID INTERFACES (DMR-8018440 A01; 12 MONTHS \$69,000

GOODKIND, JOHN M; MEASUREMENTS OF THE ORDERED PHASES OF SOLID HELIUM-3 (DMR-8022590 A01; 12 MONTHS \$62,000

LUO, HUEY-LIN; SUPERCONDUCTING PROPERTIES OF TERNARY MOLYBDENUM SULFIDES (DMR-8108421 A01; 12 MONTHS \$52,000

MILLER, DAVID R, AND WEARE, JOHN H; MOLECULAR BEAM STUDIES OF SURFACE STRUCTURE, SURFACE PHONON EXCITATIONS AND THE DYNAMICS OF GAS-SURFACE INTERACTIONS (DMR-8108425 A01; 12 MONTHS \$80,200

WOO, CHIA-WEI; MANY BODY THEORY AND STATISTICAL MECHANICS OF CONDENSED SYSTEMS (DMR-8120544; 12 MONTHS \$56,800

UNIVERSITY OF CALIFORNIA, SANTA BARBARA

KOHN, WALTER, SUGAR, ROBERT L, HARTLE, JAMES B, SAWYER, RAYMOND F, AND SCALAPINO, DOUGLAS J; INSTITUTE FOR THEORETICAL PHYSICS (PHY-7727084 A03*; 12 MONTHS \$330,000

METIU, HORIA I; THEORETICAL STUDY OF THE SPECTROSCOPY OF MOLECULES LOCATED NEAR METALLIC SURFACES (CHE-7918773 A02*; 12 MONTHS \$46,900

AHLERS, GUENTER; CRITICAL PHENOMENA NEAR THE SUPERFLUID TRANSITION OF HELIUM-4 (DMR-7923289 A03; 10 MONTHS \$110,000

HANSMA, PAUL K; ELECTRON TUNNELING STUDIES OF SOLID SURFACES AND INTERFACES (DMR-7925430 A02; 12 MONTHS \$68,000

SCALAPINO, DOUGLAS J; MANY-BODY CONDENSED MATTER (DMR-8001492 A02; 12 MONTHS \$41,500

SCALAPINO, DOUGLAS J; MANY-BODY CONDENSED MATTER (DMR-8001492 A02; 12 MONTHS \$48,000

KENNEDY, JOHN H; SOLID STATE ELECTROCHEMISTRY (DMR-8002676 A02; 12 MONTHS \$56,000

SCHRIEFFER, J ROBERT; THEORETICAL RESEARCH IN SOLID STATE PHYSICS (DMR-8007432 A02; 12 MONTHS \$83,000

HONE, DANIEL W; CONDENSED MATTER THEORY (DMR-8008004 A02; 12 MONTHS \$47,000

WALKER, WILLIAM C; CONDENSED MATTER SPECTROSCOPY (DMR-8015805 A02; 12 MONTHS \$49,000

JACCARINO, VINCENT; RESONANCE AND RELATED STUDIES IN CONDENSED MAGNETIC SYSTEMS (DMR-8017582 A01; 12 MONTHS \$176,000

MILSTEIN, FREDERICK; THEORETICAL ELASTIC BEHAVIOR OF CRYSTALS AT LARGE STRAINS (DMR-8106022 A01; 12 MONTHS \$51,900

KOHN, WALTER; THEORY OF SOLIDS (DMR-8114556 A01; 8 MONTHS \$22,000

UNIVERSITY OF CALIFORNIA, SANTA CRUZ

NAUENBERG, MICHAEL, BROWER, RICHARD C, PRIMACK, JOEL R, AND RUDNICK, JOSEPH; THEORY OF PARTICLE PHYSICS AND PHASE TRANSITION (PHY-8115541*; 12 MONTHS \$49,000

BRIDGES, FRANK G; PARAELECTRIC RESONANCE STUDIES OF OFF-CENTER PARAELECTRIC SYSTEMS (DMR-8205421; 12 MONTHS \$45,000

UNIVERSITY OF SOUTHERN CALIFORNIA

MAKI, KAZUMI; THEORETICAL STUDY OF SUPERFLUID HELIUM-3 AND OTHER CONDENSED MATTER PHYSICS (DMR-7916903 A02; 12 MONTHS \$73,000

LANGDON, TERENCE G; FLOW AND FRACTURE IN SUPERPLASTIC MATERIALS (DMR-7925378 A02; 12 MONTHS \$67,100

ONG, NAI PHUAN; NOVEL TRANSPORT PHENOMENA IN CHARGE-DENSITY-WAVE SOLIDS (DMR-8109971 A01*; 12 MONTHS \$65,000

BOZLER, HANS M; ULTRA-LOW TEMPERATURE STUDIES OF LIQUID HELIUM-3 AND LOW DIMENSIONAL MATERIALS (DMR-8200661; 12 MONTHS \$80,600

DALTON, LARRY R; CHARACTERIZATION OF CONDUCTING POLYMERS BY ADVANCED MAGNETIC RESONANCE TECHNIQUES (DMR-8206053; 12 MONTHS \$99,400

BOZLER, HANS M; DEVELOPMENT OF A HELIUM LIQUEFIER FACILITY (DMR-8207352; 24 MONTHS \$105,000

COLORADO

ASPEN CENTER FOR PHYSICS

ABRAHAMAS, ELIHU, CRONIN, JAMES W, ANDERSON, PHILIP W, AND CARRUTHERS, PETER A; SUMMER WORKSHOP ON CRITICAL PROBLEMS IN PHYSICS AND ASTROPHYSICS (PHY-8107358 A01*; 12 MONTHS \$22,300

COLORADO SCHOOL OF MINES

KRAUSS, GEORGE, AND MATLOCK, DAVID K; DEFORMATION BEHAVIOR AND STRUCTURE OF DUAL-PHASE STEELS (DMR-8115328; 12 MONTHS \$81,400

COLORADO STATE UNIVERSITY

HSU, DAVID K, AND LEISURE, ROBERT G; AN ULTRASONIC STUDY OF PALLADIUM HYDRIDES AND DEUTERIDES (DMR-8012689 A01; 12 MONTHS \$45,600

PATTON, CARL E; A BRILLOUIN LIGHT SCATTERING STUDY OF MAGNETIC EXCITATIONS (29R-8013727 A01; 12 MONTHS \$35,000

STILLE, JOHN K; CATALYSIS BY TRANSITION METALS ATTACHED TO POLYMER SUPPORTS (DMR-8016503 A01; 12 MONTHS \$80,200

UNIVERSITY OF COLORADO AT BOULDER

CLARK, NOEL A; FREELY SUSPENDED LIQUID CRYSTAL FILMS (DMR-7920169 A02; 12 MONTHS \$39,000

SCOTT, JAMES F; LIGHT SCATTERING STUDIES OF PHASE TRANSITIONS AND SPIN-FLIP PHENOMENA (DMR-8025238 A01; 12 MONTHS \$61,000

GELLER, SEYMOUR; SOLID ELECTROLYTES (DMR-8109035 A01; 12 MONTHS \$70,200

CLARK, NOEL A; STRUCTURE, DYNAMICS, AND PHASE TRANSITIONS OF SUSPENSIONS OF CHARGED POLYMER SPHERES IN EQUILIBRIUM AND NONEQUILIBRIUM STATES (DMR-8206472; 12 MONTHS \$26,800

UNIVERSITY OF DENVER-DENVER RESEARCH INSTITUTE

PREDECKI, PAUL K, AND CARPENTER, STEVE H; ACQUISITION OF X-RAY DIFFRACTION EQUIPMENT FOR MATERIALS RESEARCH (DMR-8204135*; 12 MONTHS \$44,200

UNIVERSITY OF DENVER

CARPENTER, STEVE H; ACOUSTIC EMISSION GENERATED DURING THE DEFORMATION OF CRYSTALLINE MATERIALS (DMR-8105112 A01; 12 MONTHS \$77,300

CONNECTICUT

UNIVERSITY OF CONNECTICUT

NOWOTNY, HANS; PREPARATION AND PROPERTIES OF COMPLEX CARBIDES AND NITRIDES FOR ABRASIVES (DMR-7730504 A04; 12 MONTHS \$46,800

SHAW, M T, AND JOHNSON, JULIAN F; POLYMER-POLYMER SOLUBILITY (DMR-7818076 A03; 5 MONTHS \$19,600

POTTER, DONALD I; CHANGES IN SURFACE MICROSTRUCTURE OF SUPERALLOYS CAUSED BY ION IMPLANTATION (DMR-8006084 A02; 12 MONTHS \$80,000

MORRAL, JOHN E; GROWTH AND COARSENING OF DENDRITES IN BINARY ALLOYS (DMR-8011404 A02; 12 MONTHS \$51,800

HUANG, SAMUEL J, BELL, JAMES P, AND CAMERON, J A; BIODEGRADABLE POLYMERS (DMR-8013689 A01; 12 MONTHS \$82,500

WEISS, ROBERT A; NON-EQUILIBRIUM PROCESSES IN IONOMERS (DMR-8108333 A01; 12 MONTHS \$38,900

JOHNSON, JULIAN F; ACQUISITION OF INFRARED SPECTROSCOPY AND CHROMATOGRAPHY EQUIPMENT (DMR-8115617; 12 MONTHS \$70,000

CLAPP, PHILIP C; STATISTICAL MECHANICAL MODEL OF NUCLEATION AND GROWTH IN MARTENSITIC TRANSFORMATIONS (DMR-8207034; 12 MONTHS \$80,600

POTTER, DONALD I; ACQUISITION OF A SCANNING TRANSMISSION ELECTRON MICROSCOPE FOR CHEMICAL AND METALLURGICAL ANALYSIS (DMR-8207266; 12 MONTHS \$193,700

YALE UNIVERSITY

PROBER, DANIEL E; HIGH-FIELD STUDIES OF SUPERCONDUCTING LAYERED COMPOUNDS (DMR-7817957 A04; 6 MONTHS \$26,100

WOLF, WERNER P; MAGNETIC CRYSTALS WITH WEAK INTERACTIONS (DMR-7918175 A02; 12 MONTHS \$115,000

HENRICH, VICTOR E; ELECTRON SPECTROSCOPIC STUDIES OF THE ELECTRONIC PROPERTIES OF TRANSITION-METAL-OXIDE SURFACES, CHEMISORPTION, AND STRONG METAL/SUPPORT INTERACTIONS (DMR-8202727; 12 MONTHS \$94,200

MCBRIDE, J MICHAEL; CRYSTAL CHEMISTRY OF PARAMAGNETIC ORGANIC INTERMEDIATES (DMR-8203662; 12 MONTHS \$120,300

PROBER, DANIEL E; ELECTRONIC CONDUCTION AND LOCALIZATION IN DISORDERED ONEDIMENSIONAL CONDUCTORS (DMR-8207443*; 4 MONTHS \$38,700

DELAWARE

UNIVERSITY OF DELAWARE

DYBOWSKI, CECIL R; STRUCTURE AND MOTION IN SOLID POLYMERS BY NUCLEAR MAGNETIC RESONANCE SPECTROSCOPY (DMR-8005136 A02; 12 MONTHS \$42,600

GREENFIELD, IRWIN G, AND CHOU, TSU-WEI; A STUDY OF SURFACE LAYER DAMAGE DUE TO INDENTATION FATIGUE (DMR-8007282 A02; 12 MONTHS \$55,800

STREICHER, MICHAEL A; THE RELATIONSHIP BETWEEN CORROSION OF STAINLESS ALLOYS AND ELECTROCHEMICAL MEASUREMENTS (DMR-8011981 A02; 12 MONTHS \$120,000

DANIELS, WILLIAM B; RARE GASES AND OTHER SIMPLE SYSTEMS AT HIGH PRESSURES (DMR-8100660 A01*; 12 MONTHS \$75,000

COOPER, CHARLES B; NEUTRAL SPUTTERED CLUSTERS (DMR-8108390 A01; 12 MONTHS \$40,300

DISTRICT OF COLUMBIA

GEORGE WASHINGTON UNIVERSITY

ESTERLING, DONALD M; SOLID SOLUTION STRENGTHENING AND WEAKENING (DMR-8204059; 12 MONTHS \$79,200

GEORGETOWN UNIVERSITY

CLINTON, WILLIAM L; THEORY OF ELECTRON STIMULATED DESORPTION ION ANGULAR DISTRIBUTIONS (DMR-8016665 A01; 12 MONTHS \$28,500

NATIONAL ACADEMY OF SCIENCES

REED, CHARLES K; SUPPORT OF THE SOLID STATE SCIENCES COMMITTEE (DMR-8119500*; 12 MONTHS \$20,800

FLORIDA

FLORIDA STATE UNIVERSITY

MOULTON, WILLIAM G. AND MORRIS, R. CARTER; SUPERCONDUCTING AND NORMAL ELECTRICAL PROPERTIES OF ANISOTROPIC AND ION IMPLANTED MATERIALS (DMR-7821612 A04; 6 MONTHS \$40,000)

WANG, YUNG-LI; SERIES EXPANSION METHOD FOR MAGNETIC SYSTEMS WITH SINGLE-ION ANISOTROPIES (DMR-7925369 A02; 12 MONTHS \$37,900)

UNIVERSITY OF FLORIDA-ENGINEERING & INDUSTRIAL EXPERIMENT STATION

ADAMS, BRENT L.; IMPACT OF STRAIN INHOMOGENEITY AND RECOVERY ANNEALING ON THE MULTIAXIAL YIELD BEHAVIOR OF PRESTRAINED SINGLE PHASE METALS (DMR-8112970; 12 MONTHS \$49,100)

ADAMS, BRENT L., ONODA, GEORGE Y., GOULD, ROBERT W. AND BEATTY, CHARLES L.; ACQUISITION OF X-RAY POLE FIGURE FACILITY (DMR-8212663; 12 MONTHS \$29,000)

UNIVERSITY OF FLORIDA

AMBROSE, JOHN R.; TRANSIENT ALLOY DISSOLUTION KINETICS OF ROTATING RING DISC ELECTRODES (DMR-7909242 A01; 6 MONTHS \$24,900)

SABIN, JOHN R. AND TRICKEY, SAMUEL B.; QUANTUM THEORY OF SOLIDS AND MOLECULES (DMR-7909721 A02; 12 MONTHS \$70,000)

KUMAR, PRADEEP; THEORETICAL LOW TEMPERATURE PHYSICS (DMR-8006311 A02; 12 MONTHS \$31,500)

IHAS, GARY G.; MAGNETO-HYDRODYNAMIC TEXTURES IN SUPERFLUID HELIUM THREE (DMR-8006929 A02; 12 MONTHS \$44,000)

HOGEN-ESCH, THIO E.; ION PAIRS AND THE STEREOCHEMISTRY OF ANIONIC VINYL POLYMERIZATION (DMR-8009358 A02; 12 MONTHS \$54,200)

ADAMS, E. D.; MAGNETIC AND THERMODYNAMIC STUDY OF SOLID AND LIQUID JHE (DMR-8010821 A01; 12 MONTHS \$78,000)

ANDERSON, TIMOTHY J.; SOLID-LIQUID EQUILIBRIUM IN GROUP III-V MULTICOMPONENT SYSTEMS (DMR-8012684 A01; 12 MONTHS \$47,000)

BUTLER, GEORGE B.; SYNTHETIC AND MECHANISTIC STUDIES ON NOVEL POLYMERIC SYSTEMS (DMR-8020206 A01; 12 MONTHS \$48,500)

SACKS, MICHAEL D. AND ONODA, GEORGE Y.; SINTERING OF MODEL CERAMIC POWDERS (DMR-8024320 A01; 12 MONTHS \$60,000)

ABBASCHIAN, G. J.; FUNDAMENTALS OF SOLIDIFICATION AT RAPID RATE (DMR-8202724; 12 MONTHS \$69,600)

TANNER, DAVID B. AND EPSTEIN, ARTHUR J.; INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: CONDUCTING POLYMERS; MAGNETIC, OPTICAL AND TRANSPORT STUDIES (DMR-8218021*; 4 MONTHS \$29,000)

UNIVERSITY OF MIAMI

BARNES, STEWART E.; THEORETICAL STUDIES OF DILUTE MAGNETIC ALLOYS AND GRANULAR SUPERCONDUCTORS (DMR-8120827; 12 MONTHS \$18,000)

GEORGIA

GEORGIA INSTITUTE OF TECHNOLOGY MAIN CAMPUS

O'SHEA, DONALD C.; RESONANCE SPECTRA OF SYNTHETIC METALLOPORPHYRINS (DMR-7907758 A03; 6 MONTHS \$4,300)

THOMAS, EDWARD W.; COLLISION INDUCED OPTICAL AND AUGER SPECTRA OF SOLIDS (DMR-8000671 A02; 12 MONTHS \$42,000)

SAMUELS, ROBERT J.; POLYMER MECHANICS IN THE LARGE-DEFORMATION REGION (DMR-8012692 A01; 12 MONTHS \$55,600)

UNDERWOOD, ERVIN E.; QUANTITATIVE EVALUATION OF FRACTURE SURFACES BY STEREOLOGICAL ANALYSIS (DMR-8204018; 18 MONTHS \$82,400)

UNIVERSITY OF GEORGIA

LANDAU, DAVID P.; COMPUTER SIMULATIONS OF PHASE TRANSITIONS (DMR-7926178 A02; 12 MONTHS \$50,000)

ILLINOIS

ILLINOIS INSTITUTE OF TECHNOLOGY

MUTHUKUMAR, M.; DYNAMICS OF SEMIDILUTE POLYMER SOLUTIONS (DMR-8112968; 12 MONTHS \$25,000)

NORTHERN ILLINOIS UNIVERSITY

HURYCH, ZDENEK; PHOTOEMISSION AND PHOTODESORPTION STUDIES OF SOLIDS USING SYNCHROTRON RADIATION (DMR-8108302 A02; 12 MONTHS \$73,700)

KIMBALL, CLYDE W.; LOW TEMPERATURE STUDIES OF TERNARY SUPERCONDUCTORS (DMR-8119475; 12 MONTHS \$62,400)

NORTHWESTERN UNIVERSITY

FREEMAN, ARTHUR J.; ELECTRONIC STRUCTURE AND PROPERTIES OF PERFECT AND DEFECTIVE SOLIDS (DMR-7723776 A04; 12 MONTHS \$78,000)

KLOTZ, IRVING M.; SYNTHETIC POLYMERS WITH CATALYTIC ACTIVITIES (DMR-7724152 A04; 12 MONTHS \$60,800)

HILLIARD, J. E. AND KETTERSON, JOHN B.; PROPERTIES OF COMPOSITIONALLY MODULATED ALLOYS (DMR-7824339 A02; 6 MONTHS \$40,000)

WEERTMAN, JULIA R.; SMALL ANGLE NEUTRON SCATTERING STUDY OF THE INITIATION AND EARLY GROWTH BEHAVIOR OF GRAIN BOUNDARY VOIDS (DMR-7826026 A03; 12 MONTHS \$45,700)

SCHWARTZ, LYLE H.; STRUCTURE AND STRENGTH OF SPINODAL ALLOYS (DMR-7911107 A02; 12 MONTHS \$57,200)

WEERTMAN, JOHANNES; STUDY OF INTERNAL STRESS IN CLASS I SOLID SOLUTION ALLOYS (DMR-7912136 A02; 12 MONTHS \$49,500)

JOHNSON, D. LYNN; PLASMA SINTERING OF CERAMICS (DMR-7918403 A02; 12 MONTHS \$68,800)

BRITTAIN, JOHN O. AND KANNEWURF, CARL R.; CHARACTERIZATION OF COMPOUNDS OF THE SODIUM THALLIUM STRUCTURE (DMR-7923070 A02; 12 MONTHS \$68,900)

SCHWARTZ, LYLE H.; BASIC AND APPLIED RESEARCH ON MATERIALS (DMR-7923573 A03; 12 MONTHS \$1,850,000)

SCHWARTZ, LYLE H.; BASIC AND APPLIED RESEARCH ON MATERIALS (DMR-7923573 A04; \$45,000)

COHEN, JEROME B.; LOCAL ATOMIC ARRANGEMENTS IN ALLOYS AND INTERMETALLICS (DMR-7923825 A02; 12 MONTHS \$72,000)

ELLIS, DONALD E.; DEVELOPMENT AND APPLICATION OF ONE-ELECTRON THEORY FOR TRANSITION AND HEAVY-METAL COMPOUNDS (DMR-7925379 A02; 12 MONTHS \$56,900)

CHUNG, YIP-WAH, AND FINE, MORRIS E.; INDUSTRY/UNIVERSITY CO-OPERATIVE RESEARCH ACTIVITY: SURFACE CONDITIONS ON FATIGUE CRACK INITIATION IN IRON AND STEELS (DMR-7926179 A02*; 12 MONTHS \$51,000)

SINGWI, KUNDAN S.; MICROSCOPIC THEORY OF DYNAMICAL CORRELATIONS IN ELECTRON LIQUID AND ITS APPLICATIONS (DMR-8011934 A02; 12 MONTHS \$60,500)

BRODWIN, MORRIS E. AND WHITMORE, DONALD H.; STUDIES OF MOBILE ION BEHAVIOR IN CERAMIC ELECTROLYTES USING DYNAMIC EXPERIMENTAL PROBES (DMR-8015803 A01*; 12 MONTHS \$42,900)

CRIST, BUCKLEY; LIGHT AND X-RAY SCATTERING BY POLYMER GLASSES (DMR-8016875 A01; 12 MONTHS \$38,500)

WESSELS, BRUCE W.; VAPOR PHASE EPITAXIAL INDIUM PHOSPHIDE THIN FILMS (DMR-8103324 A01; 12 MONTHS \$56,700)

MASON, THOMAS O.; ELECTRICAL STUDIES OF TRANSITION METAL OXIDE SPINELS (DMR-8106492 A01; 12 MONTHS \$52,900)

KETTERSON, JOHN B.; MATERIAL PROPERTIES AND PHENOMENA AT VERY LOW TEMPERATURES (DMR-8107385 A01; 12 MONTHS \$84,900)

HALPERIN, WILLIAM P.; ORDER PARAMETER COLLECTIVE MODES IN ^{3} HELIUM (DMR-8108709 A01; 12 MONTHS \$55,000)

HOFFMAN, BRIAN M.; NEW HIGHLY CONDUCTING MOLECULAR CRYSTALS (DMR-8116804; 12 MONTHS \$51,100)

SCANNING ELECTRON MICROSCOPY INC

JOHARI, OM; INTERNATIONAL CONFERENCE ON ELECTRON-BEAM INTERACTIONS WITH SOLIDS FOR MICROSCOPY, MICROANALYSIS, AND MICROLITHOGRAPHY, ASILOMAR, CALIFORNIA, APRIL 18-22, 1982 (DMR-8116313; 12 MONTHS \$5,000)

SOUTHERN ILLINOIS UNIVERSITY - CARBONDALE

TELSCHOW, KENNETH L.; THIRD SOUND: A STUDY OF THE SUPERFLUID FILM (DMR-8106972 A01; 12 MONTHS \$29,100)

UNIVERSITY OF CHICAGO

FREED, KARL F.; STATISTICAL MECHANICS OF POLYMER SYSTEMS (DMR-7826630 A03; 12 MONTHS \$68,200)

KADANOFF, LEO P.; RESEARCH PROGRAM IN MATERIALS SCIENCES (DMR-7924007 A03; 12 MONTHS \$850,000)

LEVI-SETTI, RICCARDO; INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: DEVELOPMENT OF A NEW HIGH-RESOLUTION SCANNING ION MICROSCOPE (DMR-8007978 A03*; 12 MONTHS \$100,000)

FRIETZSCHE, HELLMUT; ELECTRONIC PROPERTIES OF DISORDERED SEMICONDUCTORS (DMR-8009225 A02; 12 MONTHS \$135,000)

CREWE, ALBERT V.; APPLICATION OF ELECTRON BEAM TECHNOLOGY TO MATERIALS SCIENCE (DMR-8014176 A02; 12 MONTHS \$90,000)

BURDETT, JEREMY K.; THEORETICAL STUDIES ON THE STRUCTURES OF SOLIDS (DMR-8019741 A01; 12 MONTHS \$33,000)

KADANOFF, LEO P. AND MAZENKO, GENE F.; THEORETICAL SOLID STATE PHYSICS (DMR-8020609 A01; 12 MONTHS \$146,000)

KLEPPA, OLE J.; HIGH TEMPERATURE CALORIMETRY OF REFRACTORY SYSTEMS (CHEMISTRY) (CHE-8106980 A01*; 12 MONTHS \$28,600)

LEVIN, KATHRYN; THEORY OF MAGNETIC SUPERCONDUCTORS AND SPIN GLASSES (DMR-8115618; 12 MONTHS \$47,500)

NAGEL, SIDNEY R.; EXPERIMENTAL STUDIES OF AMORPHOUS MATERIALS (DMR-8201182; 12 MONTHS \$69,000)

UNIVERSITY OF ILLINOIS AT CHICAGO CIRCLE

CARLIN, RICHARD L.; SYNTHESIS, STRUCTURE AND MAGNETIC TRANSITIONS IN TRANSITION METAL COMPOUNDS (DMR-7906119 A02; 15 MONTHS \$73,000)

BAUR, WERNER H.; THE EMPIRICAL BASIS FOR COMPUTER SIMULATION OF CRYSTAL STRUCTURES (DMR-8019017 A01; 12 MONTHS \$35,400)

CLAUS, HELMUT; MAGNETIC ORDER IN ALLOYS (DMR-8101857 A01; 12 MONTHS \$48,000)

KOUVEL, JAMES S.; MAGNETISM IN TRANSITION-METAL ALLOYS AND RARE EARTH COMPOUNDS (DMR-8111076 A01; 12 MONTHS \$51,000)

UNIVERSITY OF ILLINOIS AT URBANA

ALTSTETTER, CARL J., BIRNBAUM, HOWARD K. AND RIGSBEE, J. M.; HYDROGEN EMBRITTLEMENT IN THE IRON-NICKEL-CHROMIUM SYSTEM (DMR-7709808 A05; 12 MONTHS \$176,400)

CHEN, HAYDN H.; THE EXTENDED X-RAY ABSORPTION FINE STRUCTURE STUDY OF POINT DEFECT ARRANGEMENTS IN WUSTITE AND MAGNESIO-WUSTITE (DMR-7908203 A01; 6 MONTHS \$9,400)

BROWN, FREDERICK C.; EXCITATION OF SOLIDS BY SYNCHROTRON RADIATION (DMR-7913103 A02; 12 MONTHS \$71,900)

DIOTT, DANA D.; EXCITED STATE INTERACTIONS IN MOLECULAR CRYSTAL PHOTO-CHEMISTRY (DMR-8001630 A02; 17 MONTHS \$73,300)

ANDERSON, ANSEL C.; A LOW TEMPERATURE INVESTIGATION OF AMORPHOUS MATERIALS (DMR-8006941 A02*; 12 MONTHS \$49,000)

WEISSMAN, MICHAEL B.; 1/F NOISE INVESTIGATIONS IN CONDENSED MATTER SYSTEMS (DMR-8007057 A02; 12 MONTHS \$48,000)

FLYNN, COLIN P; SYNCHROTRON RADIATION STUDIES OF IMPURITIES INTERACTING WITH METALS (DMR-8008139 A02); 15 MONTHS \$97,000

WIRTZ, GERALD P; DEFECT CHEMISTRY AND TRANSPORT PROPERTIES OF DEGENERATE OXIDE SEMICONDUCTORS (DMR-8008848 A01); 12 MONTHS \$54,200

RIGSBEE, J M; INTERFACIAL-CONTROLLED DEFORMATION AND FRACTURE MECHANISMS IN TWO-PHASE ALLOYS (DMR-8010806 A01); 12 MONTHS \$48,000

GRANATO, ANDREW V; DEFECT INTERACTIONS IN CRYSTALS (DMR-8015707 A02); 12 MONTHS \$45,600

GAYLORD, RICHARD J, AND GEIL, PHILLIP H; THE STRAIN-INDUCED CRYSTALLIZATION OF CROSSLINKED POLYMERS (DMR-8018171 A01); 12 MONTHS \$19,000

WILLIAMS, WENDELL S; PLASTIC DEFORMATION OF CEMENTED CARBIDES (DMR-8018695 A01); 11 MONTHS \$58,000

FLYNN, COLIN P; MATERIALS SCIENCE RESEARCH (DMR-8020250 A02); 12 MONTHS \$1,900,000

MCMILLAN, WILLIAM L; THEORY OF PHASE TRANSITIONS AND SUPERCONDUCTIVITY (DMR-8023361 A01); 12 MONTHS \$46,000

WOLFE, JAMES P; INFRARED IMAGING OF ELECTRON-HOLE LIQUID AND EXCITONS IN GERMANIUM (DMR-8024000 A02); 12 MONTHS \$54,000

GEIL, PHILLIP H; POLYMER MORPHOLOGY (DMR-8108300 A01); 12 MONTHS \$66,700

PETUSKEY, WILLIAM T; LIQUID SILICATE ELECTROLYTES AND THEIR INTERACTIONS WITH CERAMIC ELECTRODES (DMR-8111452 A01); 12 MONTHS \$52,000

MOCHEL, J M; QUANTUM LIQUIDS IN TWO AND THREE DIMENSIONS (DMR-8113487); 12 MONTHS \$52,000

BAYM, GORDON A, FRADKIN, E H, STONE, M, AND WORTIS, MICHAEL; PROPERTIES OF CONDENSED MATTER SYSTEMS AND FIELD THEORIES (DMR-8117182*); 12 MONTHS \$86,000

TUCKER, JOHN R; ELECTRONIC APPLICATIONS OF CHARGE DENSITY WAVE CONDUCTION (ECS-8120038*); 12 MONTHS \$20,000

PETHICK, C J, AND PINES, DAVID; QUANTUM LIQUIDS (DMR-8121273); 11 MONTHS \$94,000

ALKIRE, RICHARD C; TRANSPORT STUDIES ON PITTING CORROSION (DMR-8200781); 12 MONTHS \$90,000

EHRLICH, GERT; ATOMIC EXPLORATION OF CRYSTAL GROWTH AND REACTIVITY ON METALS (DMR-8201884*); 12 MONTHS \$122,600

BIRNBAUM, HOWARD K; ACQUISITION OF MECHANICAL TESTING EQUIPMENT (DMR-8202488); 12 MONTHS \$23,000

KLEIN, MILES V; RAMAN AND LUMINESCENCE STUDIES IN SEMICONDUCTORS (DMR-8203529); 12 MONTHS \$56,800

GINSBERG, DONALD M; SUPERCONDUCTORS WITH MAGNETIC ATOMS (DMR-8203529); 12 MONTHS \$58,700

SALAMON, MYRON B; CRITICAL AND MULTICRITICAL-POINT MEASUREMENTS ON DISORDERED MAGNETIC MATERIALS (DMR-8205484); 12 MONTHS \$46,000

INDIANA

INDIANA UNIVERSITY, BLOOMINGTON

MAHAN, GERALD D; THEORY OF CONDENSED MATTER (DMR-8016883 A01); 12 MONTHS \$47,000

CHASE, LLOYD L; LASER SPECTROSCOPY OF SOLIDS (DMR-8105005 A01); 12 MONTHS \$58,000

SCHACH, WILLIAM L; THEORETICAL STUDY OF FUNDAMENTAL PROCESSES IN CONDENSED MATTER (DMR-8115705); 12 MONTHS \$50,000

SWIHART, JAMES C; THEORETICAL STUDY OF THE ELECTRON-PHONON INTERACTION IN METALS (DMR-8117013); 12 MONTHS \$32,000

PURDUE UNIVERSITY

GIORDANO, NICHOLAS J; FABRICATION AND PROPERTIES OF ONE-DIMENSIONAL SYSTEMS (DMR-7908716 A03); 12 MONTHS \$72,000

KESOM, P H, AND HONIG, J M; PROPERTIES OF OXIDES OF VANADIUM IN THE CRYOGENIC TEMPERATURE RANGE (DMR-7908356 A03); 6 MONTHS \$3,500

SLADEK, RONALD J; ULTRASONIC AND RELATED INVESTIGATIONS OF SOLIDS (DMR-7908538 A03); 6 MONTHS \$27,700

BRAY, RALPH; LIGHT SCATTERING STUDIES OF PHONON INTERACTIONS IN PIEZOELECTRIC SEMICONDUCTORS (DMR-7914618 A02); 12 MONTHS \$65,200

FURDYNA, JACEK K; SUBMILLIMETER WAVE INVESTIGATION OF SEMI-MAGNETIC SEMICONDUCTORS (DMR-7923310 A02); 12 MONTHS \$52,000

SCHUHMAN, REINHARDT; COAL GASIFICATION KINETICS IN A JET-FLUIDIZED BED (DMR-7923756 A02); 12 MONTHS \$83,600

ANGELL, C A; SUPERCOOLED LIQUIDS AND DISORDERED CRYSTALS BY EXPERIMENT AND SIMULATION (DMR-8007053 A02); 12 MONTHS \$139,900

ROBINSON, WILLIAM R; SYNTHESIS AND CHARACTERIZATION OF ANALOGUES OF CHEVREL PHASES (DMR-8009143 A02); 15 MONTHS \$61,000

FURDYNA, JACEK K; MATERIALS RESEARCH LABORATORY (DMR-8020249 A02); 12 MONTHS \$1,350,000

HONIG, J M; PROPERTIES OF TITANOMAGNETITE SOLID SOLUTIONS (DMR-8103041 A01); 12 MONTHS \$69,900

OVERHAUSER, ALBERT W; THEORY OF INTERACTING FERMION SYSTEMS (DMR-8106044 A01); 12 MONTHS \$59,600

RAMDAS, ANANT K, AND RODRIGUEZ, S; ELECTRONIC AND VIBRATIONAL SPECTRA OF SOLIDS (DMR-8106144 A01); 12 MONTHS \$83,000

COLELLA, ROBERTO; X-RAY DIFFRACTION PHYSICS AND SOLID STATE (DMR-8108337 A01); 12 MONTHS \$40,000

VEST, ROBERT W; MICROSTRUCTURE DEVELOPMENT AND ELECTRICAL PROPERTIES FOR HETEROGENEOUS OXIDE SYSTEMS (DMR-8201690); 12 MONTHS \$60,100

SATO, HIROSHI; KINETICS OF PHASE TRANSITION (DMR-8204104); 12 MONTHS \$39,400

LIEDL, GERALD L; ACQUISITION OF A PHASE SYNCHRONOUS DETECTION SYSTEM (DMR-8208701); 12 MONTHS \$25,000

UNIVERSITY OF NOTRE DAME

ARNOLD, GERALD B; THEORY OF PROXIMITY EFFECT TUNNELING (DMR-8019739 A01); 12 MONTHS \$15,900

TOMASCH, WALTER J; ELECTRONIC TUNNELING FROM METALS (QUASIPARTICLE INTERFERENCE) (DMR-8105007 A01); 12 MONTHS \$41,000

SARGENT, GORDON A; ENVIRONMENT-ASSISTED FAILURE OF FACE-CENTERED-CUBIC IRONBASE AND NICKEL-BASE ALLOYS (DMR-8106046 A02); 12 MONTHS \$61,900

IOWA

IOWA STATE UNIVERSITY OF SCIENCE & TECHNOLOGY

LYNCH, DAVID W, AND OLSON, C G; ACQUISITION OF MONOCHROMATORS FOR PHOTOELECTRON SPECTROSCOPY (DMR-8016158 A02*); 12 MONTHS \$119,900

KENTUCKY

UNIVERSITY OF KENTUCKY

DE ANGELIS, ROBERT J; ACQUISITION OF X-RAY DIFFRACTOMETER SYSTEM (DMR-8203059); 12 MONTHS \$32,500

UNIVERSITY OF LOUISVILLE

DUPRE, DONALD B; DETERMINATION OF ELASTIC CONSTANTS OF POLYMER LIQUID CRYSTALS (DMR-8112975*); 12 MONTHS \$52,000

LOUISIANA

LOUISIANA STATE UNIVERSITY, BATON ROUGE

CALLAWAY, JOSEPH; BAND THEORY OF FERROMAGNETIC METALS (DMR-8122015); 12 MONTHS \$32,000

GOODRICH, ROY G; RADIO FREQUENCY SIZE EFFECT MEASUREMENTS IN METALS (DMR-8206116); 12 MONTHS \$37,000

HARTLEY, CRAIG S; DEFORMATION PROCESSING BY HYDROSTATIC COEXTRUSION (DMR-8210552); 6 MONTHS \$33,900

TULANE UNIVERSITY

PERDEW, JOHN P; IMPROVED DENSITY FUNCTIONALS AND THEIR APPLICATIONS TO INHOMOGENEOUS ELECTRON SYSTEMS (DMR-8016117 A01); 12 MONTHS \$20,000

MAINE

UNIVERSITY OF MAINE, ORONO

TARR, CHARLES E; DYNAMIC PROPERTIES OF LIQUID CRYSTALS (DMR-7810313 A02); 6 MONTHS \$21,300

SMITH, CHARLES W; INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: TIME AND SPACE-RESOLVED TURBULENCE IN SUPERFLUID HELIUM-4 (DMR-8005358 A02*); 12 MONTHS \$16,500

UNERTL, WILLIAM N; STRUCTURE, COMPOSITION AND THERMAL PROPERTIES OF SOLID SURFACES (DMR-8020840 A01); 12 MONTHS \$33,600

MARYLAND

JOHNS HOPKINS UNIVERSITY

KISTENMACHER, THOMAS J; STRUCTURE-PHYSICAL PROPERTY RELATIONSHIPS FOR QUASI ONE-DIMENSIONAL MATERIALS (DMR-7823957 A02); 3 MONTHS \$4,400

COWAN, DWAIN O; INDUSTRY - UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: SYSTEMATIC DEVELOPMENT OF NEW ORGANIC CONDUCTORS (DMR-8015318 A02*); 12 MONTHS \$144,800

CHIEN, CHIA-LING; SOLID STATE STUDIES OF AMORPHOUS METALLIC SOLIDS (DMR-8205155); 12 MONTHS \$60,000

WALKER, JAMES C; SOLID STATE STUDIES USING MOSSBAUER SPECTROSCOPY AND OTHER TECHNIQUES (DMR-8205496); 12 MONTHS \$77,700

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AHEARN, JOHN S; ELECTRICAL NATURE OF DISLOCATIONS IN SEMICONDUCTORS (DMR-7911914 A02); 12 MONTHS \$65,300

UNIVERSITY OF MARYLAND, COLLEGE PARK

LYNN, JEFFREY W; NEUTRON SCATTERING IN MAGNETIC MATERIALS (DMR-7900908 A02); 12 MONTHS \$75,900

FERRELL, RICHARD A; DYNAMICAL SCALING IN NORMAL AND SUPERFLUID LIQUIDS (DMR-7901173 A03*); 12 MONTHS \$65,000

FRANGE, RICHARD E, AND KORENMAN, VICTOR; CONDUCTION ELECTRONS AND MAGNETISM (DMR-7908819 A02); 12 MONTHS \$82,000

BAILEY, WILLIAM J, AND KLIMENT, CHARLES K; INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: RINGOPENING POLYMERIZATION (DMR-8016361 A01*); 12 MONTHS \$19,400

DREW, HOWARD D; FAR INFRARED PROPERTIES OF CONDUCTING MATERIALS (DMR-8025617 A01); 12 MONTHS \$60,400

PARK, ROBERT L; COMPOSITION AND ELECTRONIC STRUCTURE OF METAL AND ALLOY SURFACES (DMR-8204662); 11 MONTHS \$69,000

SENGERS, JAN V, AND FERRELL, RICHARD A; PHASE TRANSITIONS AND FLUCTUATION PHENOMENA IN FLUIDS (DMR-8205356); 12 MONTHS \$157,000

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BOSTON UNIVERSITY

KIRCZENOW, GEORGE; THEORETICAL STUDIES OF EXCITONIC SYSTEMS IN SEMICONDUCTORS (DMR-8023759 A01); 12 MONTHS \$13,000

STANLEY, H. E., REDNER, SIDNEY, AND BANSIL, RAMA; *STATISTICAL MECHANICS OF POLYMERIC MATERIALS* (DMR-8109423*); 12 MONTHS \$70,000

ZIMMERMAN, GEORGE O. AND BROOKS, JAMES S.; *INFLUENCE OF HIGH MAGNETIC FIELDS ON PROPERTIES OF 3-HELIUM AND STUDIES OF CERIUM MAGNESIUM NITRATE* (DMR-8113456 A01*); 12 MONTHS \$60,000

BRANDEIS UNIVERSITY

BERKO, STEPHAN; *SOLID STATE PHYSICS STUDIES WITH POSITRONS* (DMR-7926035 A03); 12 MONTHS \$89,000

YOUNG, CHARLES; *LASER LIGHT SCATTERING STUDIES OF FREELY SUSPENDED SMECTIC LIQUID CRYSTAL FILMS* (DMR-8006492 A02*); 12 MONTHS \$33,600

CANTER, KARL F.; *POSITRON ANNIHILATION MEASUREMENTS IN LOW TEMPERATURE HELIUM* (DMR-8109509 A01); 12 MONTHS \$29,900

HELLER, PETER; *EXPERIMENTAL STUDIES OF IN-FIELD PHASE TRANSITIONS IN PURE AND DISORDERED SYSTEMS* (DMR-8118908*); 12 MONTHS \$59,900

SCHWARTZ, LAWRENCE M.; *ELECTRONIC PROPERTIES OF DISORDERED METALS* (DMR-8118815*); 12 MONTHS \$37,000

MEYER, ROBERT B.; *MACROSCOPIC STUDIES OF POLYMER LIQUID CRYSTALS* (DMR-8210477*); 6 MONTHS \$45,800

CLARK UNIVERSITY

HOHENEMSER, CHRISTOPH, AND COLLINS, GARY; *HYPERFINE INTERACTION STUDIES IN METALS, WITH APPLICATION TO CRITICAL PHENOMENA* (DMR-8002443 A02); 12 MONTHS \$66,000

JONES, ALAN A., BENDLER, JOHN T., AND YEE, ALBERT F.; *INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: NUCLEAR SPIN RELAXATION AND LOCAL MOTIONS IN SYNTHETIC POLYMERS* (DMR-8106239 A02*); 12 MONTHS \$30,600

COLLINS, GARY, AND HOHENEMSER, CHRISTOPH; *LATTICE DEFECTS IN METALS STUDIED BY HYPERFINE INTERACTIONS* (DMR-8108307 A01); 12 MONTHS \$47,700

HARVARD UNIVERSITY

HALPERIN, BERTRAND H.; *THEORETICAL PROBLEMS IN CONDENSED MATTER AND STATISTICAL PHYSICS* (DMR-7710210 A05); 8 MONTHS \$101,100

TINKHAM, MICHAEL; *FUNDAMENTAL PROPERTIES OF SUPERCONDUCTORS* (DMR-7904155 A04); 12 MONTHS \$91,000

POUND, ROBERT V., AND VETTERLING, WILLIAM T.; *NUCLEAR RESONANCE* (DMR-7907023 A03); 12 MONTHS \$76,200

PERSHAN, PETER S.; *PHYSICAL PROPERTIES OF LIQUID CRYSTALS AND ORDERED FLUIDS* (DMR-7919479 A02); 12 MONTHS \$88,600

TURNBULL, DAVID; *EFFECTS OF 'FAST' DIFFUSING IMPURITIES ON THE PROPERTIES OF METALLIC SOLUTIONS* (DMR-8012953 A02*); 12 MONTHS \$51,000

EHRENFELT, HENRY; *MATERIALS RESEARCH LABORATORY* (DMR-8020247 A02); 12 MONTHS \$875,000

EHRENFELT, HENRY; *MATERIALS RESEARCH LABORATORY* (DMR-8020247 A03*); \$80,000

PAUL, WILLIAM; *BASIC PROPERTIES OF AMORPHOUS SEMICONDUCTORS* (DMR-8108327 A01); 12 MONTHS \$113,000

WESTERVELT, ROBERT M.; *ELECTRONIC CONDUCTION AND LOCALIZATION IN ULTRA-THIN FREE-STANDING WIRES* (DMR-8121563); 12 MONTHS \$51,600

TINKHAM, MICHAEL, AND WESTERVELT, ROBERT M.; *ACQUISITION OF DILUTION REFRIGERATOR* (DMR-8205147*); 12 MONTHS \$70,600

HALPERIN, BERTRAND H., MARTIN, PAUL C., EHRENFELT, HENRY, AND NELSON, DAVID R.; *THEORY OF CONDENSED MATTER AND STATISTICAL PHYSICS* (DMR-8207431); 12 MONTHS \$207,000

MANLABS INC

KAUFMAN, LAWRENCE; *CALCULATION OF TERNARY PHASE DIAGRAMS BY COMPUTER METHODS* (DMR-7911916 A03); 12 MONTHS \$121,400

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

WOLFF, PETER A.; *STAFFING, MANAGEMENT AND OPERATION OF THE FRANCIS BITTER NATIONAL MAGNET LABORATORY* (DMR-7101679 A36); 12 MONTHS \$3,400,000

WOLFF, PETER A.; *STAFFING, MANAGEMENT AND OPERATION OF THE FRANCIS BITTER NATIONAL MAGNET LABORATORY* (DMR-7101679 A37); \$1,050,000

OWEN, WALTER S.; *MARTENSITIC DEFORMATION UNDER CYCLIC STRESS* (DMR-7807775 A03); 12 MONTHS \$58,800

LITSTER, J. DAVID; *SCATTERING SPECTROSCOPY OF LIQUID CRYSTALS* (DMR-7823555 A03); 12 MONTHS \$97,900

MESERVEY, ROBERT H.; *SPIN POLARIZED TUNNELING TECHNIQUES FOR THE STUDY OF FERROMAGNETIC CRYSTALS* (DMR-7910047 A02); 12 MONTHS \$43,100

COHEN, MORRIS, AND OLSON, GREGORY B.; *NUCLEATION AND GROWTH OF SOLID STATE TRANSFORMATIONS* (DMR-7915196 A02); 12 MONTHS \$137,600

BIRGENEAU, ROBERT J.; *NEUTRON SCATTERING STUDIES IN ONE, TWO, AND THREE DIMENSIONS ESPECIALLY IN DISORDERED MATERIALS* (DMR-7923203 A02); 12 MONTHS \$90,000

GATOS, HARRY C., AND LAGOWSKI, JACEK; *NEW APPROACHES TO THE PREPARATION AND CHARACTERIZATION OF GAAS STRUCTURES FOR DEVICE APPLICATIONS* (ECS-7923741 A02*); 12 MONTHS \$20,000

BERKER, A. NIHA; *PHASE TRANSITIONS AND CRITICAL PHENOMENA IN LOW DIMENSIONAL SYSTEMS* (DMR-7926405 A02); 12 MONTHS \$38,500

BERNEY, CHARLES V., AND COHEN, ROBERT E.; *INTERPHASE CHARACTERISTICS IN BLOCK COPOLYMERS* (DMR-8001674 A02); 12 MONTHS \$53,400

GREYTAKE, THOMAS J., AND KLEPPNER, DANIEL; *RESEARCH ON SPIN-POLARIZED HYDROGEN* (DMR-8007350 A03); 12 MONTHS \$145,000

SHULL, C. G.; *MAGNETIC ORDERING AND NEUTRON PHYSICS STUDIES* (DMR-8021057 A01); 10 MONTHS \$162,500

RUSSELL, KENNETH C.; *DEFECT AGGREGATION IN IRRADIATED METALS* (DMR-8021244 A01); 12 MONTHS \$76,700

ALLEN, SAMUEL M.; *UNIFIED THEORETICAL AND EXPERIMENTAL APPROACH TO THE STUDY OF INTERNAL SURFACES IN SOLIDS* (DMR-8022277 A01); 12 MONTHS \$90,100

YUREK, GREGORY J.; *BASIC MECHANISMS OF THE CORROSION OF REFRACTORIES BY SLAGS* (DMR-8106986); 12 MONTHS \$65,500

WILLIAMS, JOHN E.; *CONSTRUCTION OF A 600 MHZ NUCLEAR MAGNETIC RESONANCE SPECTROMETER* (CHE-8108374 A01*); 12 MONTHS \$25,000

IWASA, YUKIKAZU, AND SMITH, JOSEPH L.; *DEVELOPMENT OF A HELIUM RECOVERY AND REPURIFICATION SYSTEM* (DMR-8110436 A01); 6 MONTHS \$18,000

CEYER, SYLVIA T.; *ANGLE-RESOLVED PHOTOEMISSION INVESTIGATION OF PHYSISORBED MOLECULAR FILMS* (DMR-8111933); 12 MONTHS \$57,000

HOBBS, L. W.; *MICROSTRUCTURAL DEVELOPMENT OF OXIDE AND SUBSTRATE DURING OXIDATION OF NICKEL AND NICKEL-BASE ALLOYS* (DMR-8115513 A01); 12 MONTHS \$85,700

KASTNER, MARC; *TIME-DEPENDENT OPTICAL ABSORPTION AND PHOTOCONDUCTIVITY IN AMORPHOUS SEMICONDUCTORS* (DMR-8115620); 12 MONTHS \$103,600

DRESSELHAUS, MILDRED S.; *INTERDISCIPLINARY MATERIALS RESEARCH* (DMR-8119295); 12 MONTHS \$2,650,000

DRESSELHAUS, MILDRED S.; *INTERDISCIPLINARY MATERIALS RESEARCH* (DMR-8119295 A01*); \$60,000

EAGAR, THOMAS W.; *SLAG METAL REACTIONS IN WELDING* (DMR-8200596); 12 MONTHS \$70,000

TULLER, HARRY L.; *DEFECTS AND CONDUCTION MECHANISMS IN NONSTOICHIOMETRIC OXIDES* (DMR-8203697); 12 MONTHS \$76,900

SUNG, C. S. P.; *PHYSICAL AGING IN AMORPHOUS POLYMERS (POLYMER SCIENCE)* (DMR-8205897); 5 MONTHS \$16,000

ROSENBLATT, CHARLES; *INVESTIGATION OF THE LIQUID CRYSTAL NEMATIC-ISOTROPIC PHASE TRANSITION IN HIGH MAGNETIC FIELDS* (DMR-8207418); 12 MONTHS \$24,000

NORTHEASTERN UNIVERSITY

WU, FA-YUEH; *STATISTICAL MECHANICS AND THE MANY-BODY PROBLEM* (DMR-7818808 A03); 7 MONTHS \$18,400

BANSIL, ARUN; *ELECTRONIC STATES IN DISORDERED MATERIALS* (DMR-7902600 A03); 6 MONTHS \$22,300

SOKOLOFF, JEFFREY B., AND PERRY, CLIVE H.; *POLARIZED NEUTRON SCATTERING BY SPIN WAVES IN FERROMAGNETIC MATERIALS* (DMR-7906371 A02); 8 MONTHS \$19,500

RIEFF, WILLIAM M.; *MAGNETIC ORDERING AND STRUCTURAL PHASE TRANSITIONS IN TRANSITION METAL COMPOUNDS* (DMR-8016441 A02); 16 MONTHS \$65,500

JOSE, JORGE V.; *LOWER DIMENSIONAL SYSTEMS WITH DISORDER* (DMR-8116483); 12 MONTHS \$19,000

SOKOLOFF, JEFFREY B., AND PERRY, CLIVE H.; *POLARIZED NEUTRON SCATTERING BY SPIN WAVES IN FERROMAGNETIC MATERIALS* (DMR-8205480); 12 MONTHS \$43,300

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KALLNE, ELISABETH; *TRANSMISSION GRATINGS AND OPTICAL CONSTANTS IN THE VACUUM ULTRAVIOLET AND X-RAY REGION* (DMR-8104381 A01); 14 MONTHS \$99,000

TUFTS UNIVERSITY

GUERTIN, ROBERT P.; *MAGNETISM AT HIGH PRESSURES* (DMR-8203690); 12 MONTHS \$55,000

UNIVERSITY OF LOWELL

BLUMSTEIN, ALEXANDRE; *FLEXIBLE POLYMERS WITH MESOGENIC GROUPS* (DMR-7925059 A02); 12 MONTHS \$63,300

BLUMSTEIN, ALEXANDRE, BLUMSTEIN, RITA B., AND CLOUGH, STUART B.; *FLEXIBLE POLYMERS WITH MESOGENIC GROUPS* (DMR-7925059 A03); \$5,200

BLUMSTEIN, ALEXANDRE; *MATRIX POLYMERIZATION* (DMR-7928048 A01); 12 MONTHS \$52,100

SALAMONE, JOSEPH C., AND WATTERSON, ARTHUR C.; *AMPHOLYTIC POLYMERS* (DMR-8102932 A01); 12 MONTHS \$59,200

UNIVERSITY OF MASSACHUSETTS, AMHERST

HALLOCK, ROBERT B.; *STATIC AND DYNAMIC PROPERTIES OF 4HE, 3HE, AND 3HE-4HE MIXTURES* (DMR-7909248 A05); 8 MONTHS \$91,800

JAKUS, KARL, RITTER, JOHN E., AND SONDERMAN, DAVID; *STATISTICAL ANALYSIS OF MULTIPLE FLAW DISTRIBUTIONS IN GLASS AND CERAMIC MATERIALS* (DMR-8006085 A02); 12 MONTHS \$43,600

CHIEN, JAMES C.; *IUPAC MACROMOLECULAR SYMPOSIUM, AMHERST, MASSACHUSETTS, JULY 12-16, 1982* (DMR-8008876 A02); 12 MONTHS \$10,000

THOMAS, EDWIN L.; *MICROSTRUCTURAL STUDIES OF POLYMERS* (DMR-8012724 A01); 12 MONTHS \$32,500

VOGL, OTTO; *POLYMERS FROM FUNCTIONALLY SUBSTITUTED CYCLIC ETHERS OR OLEFINS* (DMR-8017058 A01); 12 MONTHS \$46,400

CHIEN, JAMES C., AND KARASZ, FRANK E.; *CONDUCTIVITY IN POLYACETYLENE AND DERIVATIVES* (DMR-8019049 A01); 12 MONTHS \$69,000

OTTINO, JULIO M. AND THOMAS, EDWIN L; *DIFFUSION OF SMALL MOLECULES IN POLYMER BLENDS* (DMR-8090244 A01); 12 MONTHS \$45,800

LENZ, ROBERT W; *MONOMER REACTIVITY AND POLYMER STRUCTURE IN CATIONIC POLYMERIZATION* (DMR-8022273 A01); 12 MONTHS \$32,100

MAC KNIGHT, WILLIAM J; *MICROPHASE SEPARATION IN ORGANIC POLYMERS CONTAINING SALT GROUPS* (DMR-8106224 A01); 12 MONTHS \$53,900

HSU, SHAW LING; *VIBRATIONAL SPECTROSCOPIC STUDIES OF POLYMER MORPHOLOGY AND DEFORMATION* (DMR-8108532 A01); 12 MONTHS \$50,600

KARASZ, FRANK E. AND PORTER, ROGER S; *MATERIALS RESEARCH LABORATORY IN POLYMERS* (DMR-8119510); 12 MONTHS \$650,000

KARASZ, FRANK E. AND PORTER, ROGER S; *MATERIALS RESEARCH LABORATORY IN POLYMERS* (DMR-8119510 A01); \$15,000

GULLY, WILFRED J; *MILLIKELVIN STUDIES OF HE-3 AND HELIUM MIXTURES* (DMR-8120600); 12 MONTHS \$32,200

STEIN, RICHARD S. AND PREST, WILLIAM M; *INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: OPTICAL, X-RAY, AND NEUTRON SCATTERING STUDIES OF POLYMER MORPHOLOGY AND RELAXATION* (DMR-8202482*); 12 MONTHS \$79,000

GUYER, ROBERT A; *CLASSICAL AND QUANTUM STATISTICAL MECHANICS* (DMR-8205352); 12 MONTHS \$24,300

MICHIGAN

CALVIN COLLEGE

VAN ZYTVELD, JOHN B; *AN EXPERIMENTAL STUDY OF THE PHYSICAL AND ELECTRONIC PROPERTIES OF LIQUID TRANSITION METALS AND TRANSITION-LIKE METALS AND ALLOYS* (DMR-7909969 A02); 12 MONTHS \$9,200

MICHIGAN STATE UNIVERSITY

THORPE, MICHAEL F; *THEORY OF SOME DISORDERED SYSTEMS* (DMR-7909170 A03); 12 MONTHS \$41,500

EICK, HARRY A; *SYNTHESIS AND STRUCTURAL CHARACTERIZATION OF SOME MIXED HALIDE PHASES* (DMR-7915187 A02); 12 MONTHS \$40,000

DYE, JAMES L; *SOLID-STATE AND SOLUTION PROPERTIES OF ALKALI METAL ANIONS AND TRAPPED OR SOLVATED ELECTRONS* (DMR-7921979 A02); 13 MONTHS \$110,700

BASS, JACK, AND FOILES, CARL L; *STUDIES OF ELECTRON TRANSPORT AND MAGNETIC INTERACTIONS IN METALS* (DMR-8005865 A02); 12 MONTHS \$83,000

SCHROEDER, PETER A, BASS, JACK, BLATT, FRANK J, AND PRATT, WILLIAM P; *ELECTRONIC PROPERTIES OF METALS, SEMI-METALS AND ALLOYS DOWN TO ULTRALOW TEMPERATURES* (DMR-8108487 A01); 12 MONTHS \$112,000

MAHANTI, S D; *THEORETICAL STUDIES ON STRUCTURAL PHASE TRANSITIONS IN MOLECULAR SOLIDS* (DMR-8117297); 12 MONTHS \$30,800

MICHIGAN TECHNOLOGICAL UNIVERSITY

HELLAWELL, ANGUS; *SOLIDIFICATION STUDIES OF ALLOYS IN MONOTECTIC AND EUTECTIC SYSTEMS* (DMR-8019596 A01); 12 MONTHS \$64,100

COURTNEY, THOMAS H; *INTERPHASE BOUNDARY INITIATED FRACTURE* (DMR-8116363); 12 MONTHS \$132,300

UNIVERSITY OF MICHIGAN-ANN ARBOR

KRIMM, SAMUEL; *VIBRATIONAL SPECTRA AND STRUCTURE OF MACROMOLECULES* (DMR-7800753 A04); 12 MONTHS \$110,000

BRETZ, MICHAEL; *MONOLAYER FILMS ADSORBED ON HIGHLY UNIFORM, WELL-ALIGNED GRAPHITE SUBSTRATES* (DMR-7903614 A03); 6 MONTHS \$30,000

UHER, CTIRAD; *SUPERCONDUCTIVITY IN LOW CARRIER DENSITY GROUP V SEMIMETALS* (DMR-7924374 A03); 12 MONTHS \$39,300

SUMMERFIELD, GEORGE C, KING, JOHN S, AND ULLMAN, ROBERT; *INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: MOLECULAR CONFORMATION OF POLYMERS BY SMALL-ANGLE NEUTRON SCATTERING* (DMR-7926254 A02*); 12 MONTHS \$40,500

KOPELMAN, RAOUL; *ENERGY TRANSPORT IN MOLECULAR SOLIDS* (DMR-8000679 A02); 12 MONTHS \$78,200

GULARI, ERDOGAN; *LIGHT AND X-RAY SCATTERING STUDIES OF POLYMER SOLUTIONS* (DMR-8100130 A01); 12 MONTHS \$42,000

WADA, HARUE, AND PEHLKE, ROBERT D; *STABILITY OF CARBIDES IN ALLOY STEELS AND RESISTANCE TO HYDROGEN ATTACK* (DMR-8105026 A01); 12 MONTHS \$57,100

OVERBERGER, CHARLES G; *SYNTHESIS AND PROPERTIES OF ASYMMETRIC POLYMERS* (DMR-8106891 A01); 12 MONTHS \$76,000

LESLIE, WILLIAM C; *THE EFFECT OF ALUMINUM ON THE WORK HARDENING AND WEAR RESISTANCE OF HADFIELD MANGANESE STEEL* (DMR-8107496); 12 MONTHS \$93,000

KRIMM, SAMUEL, LUDWIG, MARTHA L, AND NORDMAN, CHRISTER E; *ACQUISITION OF COMPUTER GRAPHICS FOR VIBRATIONAL AND DIFFRACTION STUDIES OF BIOMACROMOLECULES* (PCM-8200870*); 12 MONTHS \$15,000

SANDER, LEONARD M; *INHOMOGENEOUS MANY-BODY SYSTEMS (CONDENSED MATTER)* (DMR-8203698); 12 MONTHS \$35,900

WADA, HARUE, AND PEHLKE, ROBERT D; *ACQUISITION OF A DIRECT READING RAPID NITROGEN DETERMINATOR* (DMR-8206135); 12 MONTHS \$18,100

CLARKE, ROY; *X-RAY DIFFUSE SCATTERING STUDIES OF INTERCALATION COMPOUNDS* (DMR-8207449); 12 MONTHS \$55,000

CROSBY, DAVID A; *EXTENSION OF THE UNIVERSITY OF MICHIGAN CLOSED-CYCLE HELIUM LIQUEFACTION FACILITY* (DMR-8207613); 12 MONTHS \$30,000

WAYNE STATE UNIVERSITY

DUNIFER, GERALD L; *MILLIMETER-MICROWAVE INVESTIGATION OF METALS* (DMR-7915786 A02); 12 MONTHS \$40,700

WENGER, L E; *CALORIMETRIC AND MAGNETIC STUDIES OF DISORDERED MAGNETIC MATERIALS* (DMR-7921388 A02); 12 MONTHS \$30,000

ALEXANDER, RALPH B; *INDUSTRY-UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: ION CHANNELING STUDIES OF SOLIDS* (DMR-8007248 A03*); 12 MONTHS \$30,000

CHEN, JUEI-TENG, AND CHANG, JHY-JIUN; *JOSEPHSON VORTEX PROPERTIES AND NONEQUILIBRIUM SUPERCONDUCTIVITY* (DMR-8024052 A01); 12 MONTHS \$58,000

MINNESOTA

UNIVERSITY OF MINNESOTA

SCHMIDT, LANNY D; *INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: STRUCTURE AND KINETICS IN GAS-SURFACE INTERACTIONS* (DMR-7919233 A02*); 12 MONTHS \$65,900

CAMPBELL, CHARLES E; *THEORY OF QUANTUM FLUIDS* (DMR-7926447 A02); 12 MONTHS \$36,800

GOLDMAN, ALLEN M; *TUNNELING AND TRANSPORT IN ORDERED AND DISORDERED SUPERCONDUCTORS* (DMR-8006959 A02); 12 MONTHS \$108,900

OVEREND, JOHN; *INFRARED SPECTROSCOPY OF ADSORBATES ON LOW-AREA METAL SURFACES* (DMR-8016509 A01); 12 MONTHS \$46,500

TIRRELL, MATTHEW V; *MACROMOLECULES IN NARROW CHANNELS* (DMR-8115733); 12 MONTHS \$42,200

TIRRELL, MATTHEW V; *MACROMOLECULES IN NARROW CHANNELS* (DMR-8115733 A01); \$17,600

MACOSKO, CHRIS W; *INDUSTRY-UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: POLYURETHANE REACTION INJECTION MOLDING* (CPE-8118232*); 12 MONTHS \$37,300

HUANG, CHENG-CHE R, AND PINDAK, RONALD; *INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: HEAT CAPACITY AND OPTICAL STUDIES ON LIQUID CRYSTALS* (DMR-8204219*); 12 MONTHS \$29,000

UNIVERSITY OF MINNESOTA AT SAINT PAUL

GOLDMAN, ALLEN M; *PERCOLATION, LOCALIZATION AND SUPERCONDUCTIVITY IN METAL-GAS SOLIDS* (DMR-8011948 A01); 5 MONTHS \$14,000

ZIMMERMANN, WILLIAM; *JOSEPHSON EFFECTS IN SUPERFLUID 4-HELIUM* (DMR-8112973); 12 MONTHS \$42,900

MISSISSIPPI

UNIVERSITY OF MISSISSIPPI

BOO, WILLIAM O; *PREPARATION AND STUDY OF LOWER VALENCE FLUORIDES OF VANADIUM AND RELATED MATERIALS* (DMR-7900315 A03); 6 MONTHS \$17,600

PANETTA, CHARLES A, AND METZGER, ROBERT M; *ELECTRICAL RECTIFICATION BY ORGANIC MONOLAYERS: SYNTHESIS AND SCREENING* (DMR-8015658 A01); 12 MONTHS \$53,800

UNIVERSITY OF SOUTHERN MISSISSIPPI

GRIFFIN, ANSELM C; *EFFECT OF MOLECULAR STRUCTURE ON MESOMORPHIC BEHAVIOR* (DMR-8115708); 12 MONTHS \$40,500

MISSOURI

UNIVERSITY OF MISSOURI, COLUMBIA

SCHMIDT, PAUL W; *SMALL-ANGLE X-RAY SCATTERING STUDIES* (DMR-7903943 A02); 12 MONTHS \$40,000

TAUB, HASKELL; *NEUTRON SCATTERING STUDY OF THE STRUCTURE AND DYNAMICS OF ADSORBED HYDROCARBONS* (DMR-7905958 A03); 6 MONTHS \$17,300

MILDNER, DAVID F, AND BERLINER, RONALD R; *ACQUISITION OF A POSITION SENSITIVE NEUTRON DETECTOR FOR A POWDER DIFFRACTOMETER* (DMR-8114975); 10 MONTHS \$15,800

WERNER, SAMUEL A, AND YELON, WILLIAM B; *NEUTRON SCATTERING INVESTIGATIONS OF THE TRANSITION METAL SESQUIOXIDES* (DMR-8200350); 12 MONTHS \$34,000

UNIVERSITY OF MISSOURI, ROLLA

WUTTIG, MANFRED R, AND SUZUKI, TETSURO; *NONLINEAR ANELASTICITY OF METALS AND ALLOYS* (DMR-7902628 A03); 12 MONTHS \$95,900

DAY, DELBERT E; *THERMALLY STIMULATED CURRENTS IN ALKALI CONTAINING GLASSES* (DMR-8203077); 12 MONTHS \$48,900

ANDERSON, HARLAN U, AND WUTTIG, MANFRED R; *LIQUID CORROSION OF CERAMICS* (DMR-8210462); 12 MONTHS \$75,900

WASHINGTON UNIVERSITY

YARIS, ROBERT, AND SCHAEFER, JACOB F; *INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: RELAXATION STUDIES ON GLASSY POLYMERS* (DMR-8007085 A02*); 12 MONTHS \$22,500

CLARK, JOHN W; *MICROSCOPIC THEORY OF QUANTUM FLUIDS AND EXTENDED NUCLEAR SYSTEMS* (DMR-8008229 A02*); 12 MONTHS \$21,300

NORBERG, RICHARD E, AND LUSZCZYNSKI, KAZIMIERZ; *PULSED MAGNETIC RESONANCE AND OTHER STUDIES AT LOW TEMPERATURE* (DMR-8010818 A02); 12 MONTHS \$144,500

BOLEF, DAN I, AND SUNDFORS, RONALD K; *ACOUSTIC MAGNETIC RESONANCE STUDIES OF METALS AND ALLOYS* (DMR-8106143 A01); 11 MONTHS \$98,000

KARDOS, JOHN L; A MOLECULAR COMPOSITE APPROACH TO ADVANCED POLYMERIC SOLIDS (DMR-8201228; 12 MONTHS \$60,000
 NORBERG, RICHARD E, AND FEDDERS, PETER A; SPIN RELAXATION AND THE STRUCTURE AND DYNAMICS OF DEFECTS IN MATERIALS (DMR-8204166; 10 MONTHS \$35,800

LIN, TIEN SUNG T; STRUCTURE AND DYNAMICS OF PHOTOEXCITED ORGANIC SOLIDS (DMR-8205422; 6 MONTHS \$39,000

MONTANA

MONTANA STATE UNIVERSITY

CONE, RUFUS L; COHERENT LASER STUDIES OF DYNAMIC AND CO-OPERATIVE PHENOMENA IN SOLIDS (DMR-7906892 A02; 12 MONTHS \$53,000

SCHMIDT, V HUGO; CRITICAL DYNAMICS IN H-BONDED FERROELECTRICS (DMR-8205280; 12 MONTHS \$48,300

NEBRASKA

UNIVERSITY OF NEBRASKA AT LINCOLN

ECKHARDT, CRAIG J; PIEZOMODULATION SPECTROSCOPY OF MOLECULAR CRYSTALS (DMR-7908759 A03; 12 MONTHS \$144,600

SELLMYER, DAVID J; ELECTRONS IN COMPLEX SOLIDS (DMR-8110520 A01; 12 MONTHS \$59,000

JOHNSON, DONALD L, WEINS, WILLIAM N, AND WOOLAM, JOHN; ACQUISITION OF X-RAY DIFFRACTOMETER SYSTEM (DMR-8203471; 12 MONTHS \$39,300

NEW HAMPSHIRE

DARTMOUTH COLLEGE

STOCKMAYER, WALTER H; PHYSICAL CHEMISTRY OF POLYMER SOLUTIONS (DMR-7913227 A03; 12 MONTHS \$40,000

NEW JERSEY

PRINCETON UNIVERSITY

BERNASEK, STEVEN L; TRANSITION METAL COMPOUND SURFACES (DMR-8019772 A02; 16 MONTHS \$80,600

ANDERSON, PHILIP W, AND STEIN, DANIEL L; INDUSTRY-UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: APPLICATIONS OF MANY-BODY THEORY (DMR-8020263 A01; 12 MONTHS \$68,500

DE CONDE, KEITH; EXPERIMENTS ON SUPERFLUID HELIUM THREE AND DISORDERED SOLIDS (DMR-8104414 A01; 12 MONTHS \$60,000

SOOS, ZOLTAN G; THEORETICAL MODELS FOR CORRELATED NARROW-BAND MOLECULAR SOLIDS (DMR-8105010; 12 MONTHS \$26,200

KOBERSTEIN, JEFFREY T; DIFFUSE BOUNDARY STRUCTURE IN MULTIPHASE POLYMER SYSTEMS (DMR-8105612 A01; 12 MONTHS \$42,000

HALL, CAROL K; STATISTICAL THEORY OF THE PHASE-CHANGE BEHAVIOR OF METALHYDROGEN SYSTEMS (CHEMISTRY) (CHE-8109557 A01; 12 MONTHS \$18,800

KAHN, ANTOINE, AND DUKE, CHARLES B; INDUSTRY-UNIVERSITY COOPERATIVE RESEARCH: STRUCTURE AND PROPERTIES OF COLUMN III ELEMENTS ADSORBED ON III-V COMPOUND SEMICONDUCTORS (DMR-8205132; 12 MONTHS \$40,500

GILLHAM, JOHN K, KOBERSTEIN, JEFFREY T, AND MAXWELL, BRYCE; ACQUISITION OF A THERMAL ANALYSIS SYSTEM (DMR-8206187; 12 MONTHS \$40,700

RUTGERS UNIVERSITY-BUSCH CAMPUS

GLABERSON, WILLIAM; VELOCITY AND THERMAL ROTATION IN SUPERFLUID HELIUM (DMR-7825409 A03; 5 MONTHS \$70,000

TSAKALAKOS, THOMAS; THE SUPERMODULUS EFFECT IN BULK ALLOYS (DMR-7826503 A03; 12 MONTHS \$44,700

LANGRETH, DAVID C; ELECTRON CORRELATIONS AND PROPERTIES OF METALS AND INSULATORS (DMR-8007470 A02; 12 MONTHS \$48,400

SCHNEIBEIM, JERRY I, AND COUCHMAN, PETER R; POLYMER BLENDS AT ATMOSPHERIC AND HIGH HYDROSTATIC PRESSURES (DMR-8106153 A01; 12 MONTHS \$53,600

SCHNEIBEIM, JERRY I, AND COUCHMAN, PETER R; POLYMER BLENDS AT ATMOSPHERIC AND HIGH HYDROSTATIC PRESSURES (DMR-8106153 A02; \$7,500

GREENBLATT, MARTHA; PREPARATION AND PROPERTIES OF COMPOUNDS WITH TRANSITION ELEMENTS IN NOVEL OXIDATION STATES (DMR-8115977; 12 MONTHS \$44,100

RUTGERS UNIVERSITY

ABRAHAMS, ELIHU, AND SAK, JOSEPH; THEORETICAL SOLID STATE PHYSICS (DMR-7921360 A02; 12 MONTHS \$78,000

KLEIN, LISA C; KINETICS OF THE SOL-GEL TRANSITION (DMR-8012902 A01; 12 MONTHS \$30,000

WEISSMANN, SIGMUND; X-RAY STUDIES OF FRACTURE PROBLEMS AND CORRELATION TO FRACTURE MECHANICS (DMR-8104985 A01; 12 MONTHS \$58,500

STEPHEN, MICHAEL J; CRITICAL PHENOMENA IN DISORDERED SYSTEMS (DMR-8106151 A01; 12 MONTHS \$49,700

LEBOWITZ, JOEL L; BASIC STUDIES IN STATISTICAL MECHANICS (DMR-8114786; 12 MONTHS \$38,000

LINDENFELD, PETER, AND MCLEAN, WILLIAM L; ELECTRIC AND MAGNETIC MEASUREMENTS ON GRANULAR METALS (DMR-8118062; 12 MONTHS \$102,000

CARR, HERMAN Y; NMR STUDIES OF PHASE TRANSITIONS IN RARE GAS SUBMONOLAYERS (DMR-8200746; 12 MONTHS \$20,500

KOLLER, NOEMIE; STUDIES OF HYPERFINE INTERACTIONS AND ELECTRONIC STRUCTURE BY MOSSBAUER-CONVERSION ELECTRON SPECTROSCOPY (DMR-8201090; 12 MONTHS \$58,000

TEXTILE RESEARCH INSTITUTE

WEIGMANN, HANS D; SURFACE-CONTROLLED CRYSTALLIZATION OF FIBROUS POLYMERS (DMR-7905980 A03; 3 MONTHS \$48,700

NEW MEXICO

LOS ALAMOS SCIENTIFIC LABORATORY

KITCHENS, THOMAS A; IPA MOBILITY ASSIGNMENT (THOMAS A. KITCHENS) (DMR-8026476 A01; 5 MONTHS \$26,600

KITCHENS, THOMAS A; IPA MOBILITY ASSIGNMENT (THOMAS A. KITCHENS) (DMR-8026476 A02; 1 MONTHS \$5,000

NEW MEXICO INSTITUTE OF MINING AND TECHNOLOGY

MEYERS, MARC A; MARTENSITIC TRANSFORMATION INDUCED BY TENSILE STRESS WAVES (DMR-8115127; 12 MONTHS \$79,700

NEW YORK

ADELPHI UNIVERSITY

RUDDMAN, REUBEN; CALORIMETRIC AND X-RAY STUDIES OF ORIENTATIONAL DISORDER IN CRYSTALS (DMR-7825365 A03; 6 MONTHS \$15,100

ALFRED UNIVERSITY-NEW YORK STATE COLLEGE OF CERAMICS

SNYDER, ROBERT L; ACQUISITION OF A MINI COMPUTER FOR THE CONTROL AND ANALYSIS OF X-RAY POWDER DIFFRACTION (DMR-8115242; 12 MONTHS \$53,600

CITY COLLEGE

ALFANO, ROBERT R; SPIN ALIGNED ELECTRONS IN SEMICONDUCTORS (DMR-7817805 A03; 12 MONTHS \$35,000

CUMMINS, HERMAN Z; LASER LIGHT SCATTERING STUDIES OF SOLIDS (DMR-8020835 A01; 12 MONTHS \$93,000

CLARKSON COLLEGE OF TECHNOLOGY

GLASSER, M LAWRENCE; ELLIPTIC INTEGRALS, LATTICE SUMS AND THEIR APPLICATIONS (MCS-8021280 A01; 12 MONTHS \$6,900

RASMUSSEN, DON H; EMULSIFICATION, UNDERCOOLING AND NUCLEATION OF PURE METALS AND ALLOYS (DMR-8107117 A01; 12 MONTHS \$52,700

COLLEGE OF ENVIRONMENTAL SCIENCE AND FORESTRY

SMID, JOHANNES; MACROHETEROCYCLIC AND ACYCLIC LIGANDS ANCHORED TO LINEAR AND NETWORK POLYMERS: SOLUTE BINDING AND CATALYSIS (CHEMISTRY) (CHE-8205881; 12 MONTHS \$22,000

COLLEGE OF STATEN ISLAND-SUNNYSIDE

ODIAN, GEORGE; INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: ZWITTERION POLYMERIZATION (DMR-8105865; 12 MONTHS \$21,700

COLUMBIA UNIVERSITY

MACHLIN, EUGENE S; INTERATOMIC POTENTIALS TO STUDY PHYSICAL PHENOMENA IN ALLOY SYSTEMS (DMR-8004237 A02; 12 MONTHS \$80,800

NOWICK, ARTHUR S; DEFECTS AND DEFECT MOBILITY IN IONIC CRYSTALS (DMR-8006326 A02; 12 MONTHS \$64,800

HARTMANN, SVEN R; SPECTROSCOPY, RELAXATION, AND EXCITATION TRANSFER OF OPTICALLY EXCITED STATES IN SOLIDS (DMR-8006966 A02; 12 MONTHS \$30,000

TIE, JOHN K; HIGH TEMPERATURE CREEP, STRESS RUPTURE, AND CRACK GROWTH IN MULTIPHASE ALLOYS (DMR-8011402 A02; 12 MONTHS \$76,200

SANCHEZ, JUAN M; THERMODYNAMIC MODELING OF TERNARY ALLOYS (DMR-8206195; 12 MONTHS \$59,400

CORNELL UNIVERSITY

SASS, STEPHEN L; DIFFRACTION STUDIES OF GRAIN BOUNDARY STRUCTURES IN FACE-CENTERED-CUBIC METALLIC MATERIALS (DMR-7916331 A02; 12 MONTHS \$92,000

SASS, STEPHEN L; DIFFRACTION STUDIES OF GRAIN BOUNDARY STRUCTURES IN FACE-CENTERED-CUBIC METALLIC MATERIALS (DMR-7916331 A03; \$17,100

RHODIN, T N; ELECTRONIC STRUCTURE OF PROTOTYPE ADSORBATE-MODIFIED METAL SURFACES (DMR-7919547 A02; 12 MONTHS \$47,000

KRAMER, EDWARD J; FUNDAMENTALS OF ENVIRONMENTAL FRACTURE IN POLYMERS (DMR-7919828 A02; 12 MONTHS \$49,000

JOHNSON, HERBERT H; INTERDISCIPLINARY MATERIALS RESEARCH (DMR-7924008 A03; 12 MONTHS \$5,450,000

JOHNSON, HERBERT H; INTERDISCIPLINARY MATERIALS RESEARCH (DMR-7924008 A04; \$45,000

BLAKELY, JOHN M; SEGREGATION, ADSORPTION AND REACTIONS AT METAL SURFACES (DMR-7926443 A02; 12 MONTHS \$105,000

HO, WILSON; TIME-RESOLVED VIBRATIONAL SPECTROSCOPY OF SURFACE DYNAMICS (DMR-8022786 A01; 12 MONTHS \$48,900

SIENKO, M J; SOLID STATE CHEMISTRY AND CATALYSIS BY LAYERED DICHALCOGENIDES (DMR-8024050 A01; 12 MONTHS \$70,700

KOHLSTEDT, DAVID L; KINETIC DEMIXING OF NON-HYDROSTATICALLY STRESSED MULTICOMPONENT OXIDES AND SILICATES (DMR-8100131; 12 MONTHS \$40,000

FREED, JACK H; MOLECULAR DYNAMICS, STRUCTURE, AND PHASE TRANSITIONS IN LIQUID-CRYSTALLINE MEDIA: ESR STUDIES (DMR-8102047 A01; 12 MONTHS \$64,000

CARTER, C B; STRUCTURE OF SOLID-SOLID PHASE BOUNDARIES AND THEIR RELATION TO THE MODE OF SOLID STATE REACTIONS (DMR-8102998 A01; \$11,800

- CARTER, C B; *STRUCTURE OF SOLID-SOLID PHASE BOUNDARIES AND THEIR RELATION TO THE MODE OF SOLID STATE REACTIONS* (DMR-8102994 A02); 12 MONTHS \$73,700
- JOHNSON, HERBERT H; *ACQUISITION OF A LIQUEFIER FOR MATERIALS PHYSICS* (DMR-8103018 A01); \$75,000
- SIEVERS, ALBERT J; *THE INFRARED AND OPTICAL PROPERTIES OF CLEAN AND ADSORBATE COVERED METAL SURFACES* (DMR-8106097 A01); 12 MONTHS \$57,000
- MAYER, JAMES W; *INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: BEAM INDUCED SURFACE ALLOYING* (DMR-8106843*); 12 MONTHS \$75,000
- FISHER, MICHAEL E; *STATISTICAL MECHANICS AND PHASE TRANSITIONS* (DMR-8117011); 12 MONTHS \$111,000
- RHODIN, T N, AND RATHBUN, L C; *REACTIVE ION PROCESSES IN SEMICONDUCTOR TECHNOLOGY: ION-STIMULATED SURFACE CHEMISTRY* (DMR-8117069); 12 MONTHS \$80,685
- LEE, DAVID M, REPPY, JOHN D, RICHARDSON, ROBERT C, AND SMITH, ERIC N; *SUPERFLUID HELIUM-3* (DMR-8119847); 12 MONTHS \$278,800
- SIENKO, M J; *THE METAL-NONMETAL TRANSITION IN EXPANDED-LITHIUM SYSTEMS* (DMR-8120324); 12 MONTHS \$101,700
- WOLF, EDWARD D; *NATIONAL RESEARCH AND RESOURCE FACILITY FOR SUBMICRON STRUCTURES* (ECS-8200312*); 12 MONTHS \$160,000
- CORNELL UNIVERSITY-CORNELL UNIVERSITY - ENDOWED
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- WILSON, KENNETH G; *ACQUISITION OF AN ARRAY PROCESSOR FOR SCIENTIFIC COMPUTING* (DMR-7927167 A01*); 12 MONTHS \$27,400
- SILSBEE, ROBERT H; *ELECTRON SPIN RESONANCE* (DMR-8008546 A02); 12 MONTHS \$52,100
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- AMBEGAOKAR, VINAY; *THEORETICAL CONDENSED MATTER PHYSICS* (DMR-8020429 A01); 12 MONTHS \$289,200
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- COHEN, CLAUDE; *RELAXATION AND DIFFUSION IN POLYMERS* (DMR-8111114 A01); 12 MONTHS \$42,600
- BATTERMAN, BORIS W, AND ASHCROFT, NEIL W; *OPERATION OF THE CORNELL HIGH ENERGY SYNCHROTRON SOURCE* (DMR-8112822); 12 MONTHS \$543,300
- BATTERMAN, BORIS W, AND ASHCROFT, NEIL W; *OPERATION OF THE CORNELL HIGH ENERGY SYNCHROTRON SOURCE* (DMR-8112822 A01); 12 MONTHS \$543,300
- POHL, ROBERT O; *EXPLORATION OF THE LOWER LIMIT OF THERMAL CONDUCTIVITY IN NONMETALLIC SOLIDS* (DMR-8207079*); 6 MONTHS \$36,500
- LEE, DAVID M, AND FREED, JACK H; *STUDIES OF ATOMIC HYDROGEN AND OTHER FREE RADICALS AT LOW TEMPERATURES AND IN HIGH MAGNETIC FIELDS* (29R-8211508); 12 MONTHS \$19,500
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- WILLIAMSON, SAMUEL J; *ELECTRONIC AND MAGNETIC PROPERTIES OF SOLIDS AT LOW TEMPERATURES* (DMR-7917401 A02); 12 MONTHS \$53,400
- BRENNER, HENRY C; *TRIPLET ENERGY MIGRATION IN MOLECULAR CRYSTALS* (DMR-8024275 A01); 12 MONTHS \$51,600
- SPENCER, THOMAS; *RIGOROUS ANALYSIS OF CRITICAL PHENOMENA (MATHEMATICS)* (DMR-8100417 A01*); 12 MONTHS \$14,000
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- BANKS, EPHRAIM; *ANION-DEFICIENT OXIDES AS CATALYSTS: RELATION BETWEEN ANION VACANCIES AND CATALYTIC ACTIVITY* (DMR-7724133 A03); 6 MONTHS \$4,700
- MARGOLIN, HAROLD; *GRAIN BOUNDARY CONTRIBUTION TO THE BAUSCHINGER EFFECT AND SLIP SYSTEM CRITERIA* (DMR-8018849 A01); 12 MONTHS \$59,600
- MERAJVER, SOFIA D, AND WUNDER, STEPHANIE L; *RAMAN SPECTROSCOPIC STUDY OF POLYETHYLENE* (DMR-8106231 A01); 12 MONTHS \$40,000
- MORAWETZ, HERBERT; *POLYMER STUDIES BY FLUORESCENCE TECHNIQUES* (DMR-8120226); 12 MONTHS \$86,500
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- GLICKSMAN, MARTIN E; *SOLUTE REDISTRIBUTION DURING SOLIDIFICATION* (DMR-7721638 A04); 12 MONTHS \$90,700
- WUNDERLICH, BERNHARD; *THE SOLID STATE OF LINEAR MACROMOLECULES* (DMR-7815279 A04); 12 MONTHS \$92,600
- HUNTINGTON, HILLARD B; *ELECTROMIGRATION IN METALS* (DMR-7925026 A02); 6 MONTHS \$36,900
- MACCRONE, ROBERT K; *MAGNETIC STUDIES OF TRANSITION METAL IONS IN OXIDE GLASSES* (DMR-8011439 A02); 12 MONTHS \$62,800
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- FRISCH, HARRY L; *MACROMOLECULAR ARCHITECTURE AND POLYMERIC SYSTEMS* (DMR-7805938 A04); 12 MONTHS \$80,600
- GIBSON, WALTER M; *INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: ATOM LOCATION BY STANDING WAVE X-RAY INTERFEROMETRY* (DMR-8017303 A01*); 12 MONTHS \$38,500
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- REICHERT, JONATHAN F; *MAGNETIC RESONANCE PROPERTIES OF IONS IN NOBLE GAS LIQUIDS AND SOLIDS* (DMR-7823973 A03); 6 MONTHS \$17,000
- EHRLICH, PAUL, AND ANDERSON, WAYNE A; *PHOTOCONDUCTIVITY AND PHOTOVOLTAIC EFFECTS IN LINEAR CONJUGATED POLYMERS* (DMR-7916912 A01); 4 MONTHS \$21,000
- GASPARINI, FRANCIS M; *HELIUM THREE AND HELIUM FOUR IN THE TWO DIMENSIONAL AND THREE DIMENSIONAL LIMIT* (DMR-8007303 A02); 12 MONTHS \$64,000
- HO, JOHN T; *BIREFRINGENCE STUDIES OF PHASE TRANSITIONS IN SMECTIC LIQUID CRYSTALS* (DMR-8019985 A01); 12 MONTHS \$40,600
- PRASAD, PARAS N; *PHONON SPECTROSCOPY OF ORGANIC SOLIDS USING A SUBMILLIMETER WAVE LASER* (DMR-8108298 A01); 12 MONTHS \$46,700
- STATE UNIVERSITY AT STONY BROOK
- JONA, FRANCO P; *NEW ASPECTS OF SURFACE CRYSTALLOGRAPHY BY LEED AND PHOTOEMISSION* (DMR-7909691 A03); 12 MONTHS \$75,100
- KAO, YI-HAN; *PHYSICAL PROPERTIES OF SUPERCONDUCTING WEAK LINKS* (DMR-8006083 A03); 6 MONTHS \$28,000
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- CLAYTON, CLIVE R; *PASSIVITY AND THE BREAKDOWN OF PASSIVITY OF STAINLESS STEELS* (DMR-8106439 A01); 12 MONTHS \$61,900
- CLAYTON, CLIVE R; *ACQUISITION OF DATA COLLECTION SYSTEM FOR SURFACE ANALYSIS FACILITY* (DMR-8117321); 12 MONTHS \$24,400
- ALLEN, PHILIP B; *THEORETICAL STUDIES OF METALS, SEMICONDUCTORS, AND SUPERCONDUCTORS* (DMR-8121954); 12 MONTHS \$75,100
- MCCOY, BARRY, AND PERK, JACQUES H H; *STATISTICAL MECHANICAL AND QUANTUM FIELD THEORY MODELS* (DMR-8206390*); 12 MONTHS \$35,300
- STATE UNIVERSITY OF NEW YORK SYSTEM OFFICE
- PREWITT, CHARLES T, AND SHANNON, ROBERT D; *INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: SYNTHESIS, CRYSTAL STRUCTURES AND CATALYTIC ACTIVITY OF TERNARY NOBLE-METAL OXIDES* (DMR-7906900 A01); 6 MONTHS \$30,000
- UNIVERSITY OF ROCHESTER
- CASTNER, THEODORE G; *MAGNETIC AND ELECTRICAL STUDIES ON DOPED SEMICONDUCTORS ON THE INSULATING SIDE OF THE METAL NON-METAL TRANSITION* (DMR-8007625 A02); 12 MONTHS \$62,000
- KENKRE, V M, AND DUKE, CHARLES B; *INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: CHARGE TRANSPORT IN MOLECULAR CRYSTALS* (DMR-8111434*); 8 MONTHS \$24,200
- HSIANG, THOMAS Y, AND MOUROU, GERARD A; *PICOSECOND PHENOMENA IN NONEQUILIBRIUM SUPERCONDUCTORS* (DMR-8204301); 12 MONTHS \$58,269
- NORTH CAROLINA
- DUKE UNIVERSITY
- PALMER, RICHARD G; *THEORETICAL SPIN GLASS MODELS* (DMR-8011937 A01); 12 MONTHS \$13,500
- MEYER, HORST; *PROPERTIES OF QUANTUM SOLIDS AND CRITICAL BEHAVIOR OF FLUID HELIUM* (DMR-8024056 A02); 12 MONTHS \$120,000
- KRIGBAUM, WILLIAM R; *INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: PHYSICO-CHEMICAL STUDIES OF RODLIKE AND SEMI-FLEXIBLE CHAIN POLYMERS* (DMR-8106160*); 12 MONTHS \$39,800
- BEHRINGER, ROBERT P; *SUPERFLUID DENSITY AND VISCOSITY MEASUREMENTS IN LIQUID HELIUM* (DMR-8205129); 12 MONTHS \$27,000
- NORTH CAROLINA STATE UNIVERSITY AT RALEIGH
- HAASE, DAVID G, AND KLENIN, MARJORIE A; *STUDY OF GLASS-LIKE ORDERING IN QUADRUPOLE SOLIDS* (DMR-7923202 A02); 12 MONTHS \$49,000
- DAVIS, ROBERT F; *ACQUISITION OF AN ION MICROSCOPE* (DMR-8107499 A01*); 12 MONTHS \$43,500
- DAVIS, ROBERT F; *KINETICS AND MECHANISMS OF CREEP IN SINTERED ALPHA SILICON CARBIDE AND NIOBIUM CARBIDE* (29R-8120804); 12 MONTHS \$70,000
- UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL
- ROBERTS, LOUIS D; *METALS AND ALLOYS* (DMR-7818916 A03); 8 MONTHS \$44,000
- SILVER, MARVIN; *TIME-DEPENDENT PERCOLATION APPROACH TO DIFFUSION AND DRIFT IN TOPOLOGICALLY DISORDERED MATERIALS* (DMR-7920023 A02); 12 MONTHS \$50,900
- SLIFKIN, LAWRENCE M; *POINT DEFECTS IN IONIC CRYSTALS* (DMR-8121418); 12 MONTHS \$56,000

OHIO

BOWLING GREEN STATE UNIVERSITY

NECKERS, DOUGLAS C; PHOTOCHEMISTRY OF POLYMERS (DMR-8103100 A01); 12 MONTHS \$51,100

CASE WESTERN RESERVE UNIVERSITY-CASE INSTITUTE OF TECHNOLOGY

WELSCH, GERHARD E; EFFECT OF SLIP MODE IN OXYGEN RICH TITANIUM ALLOYS ON MONOTONIC AND CYCLIC DEFORMATION BEHAVIOR (DMR-8121772); 12 MONTHS \$91,400

CASE WESTERN RESERVE UNIVERSITY

HEUER, ARTHUR H; MICROSTRUCTURAL STUDIES IN ZIRCONIA-BASED CERAMICS (DMR-7719163 A05); 12 MONTHS \$99,300

COOPER, ALFRED R; STRENGTHENING OF GLASS (DMR-7808574 A04); 12 MONTHS \$85,300

DAHM, ARNOLD J; WIGNER LATTICES IN TWO DIMENSIONS (DMR-7920833 A03); 12 MONTHS \$95,000

KOENIG, JACK L; IMPROVED SPECTROSCOPIC CHARACTERIZATION OF POLYMER SYSTEMS (DMR-8011185 A01); 12 MONTHS \$44,000

SIMHA, ROBERT; STATISTICAL THERMODYNAMICS OF POLYMERS: MIXTURES AND GLASSES (DMR-8012232 A01); 12 MONTHS \$50,500

BAER, ERIC; THE MECHANICAL BEHAVIOR OF POLYMER GLASSES FROM HIGHLY COMPATIBLE BLENDS (DMR-8018129 A01); 12 MONTHS \$47,000

HALLORAN, JOHN W; INFLUENCE OF POWDER CHARACTERISTICS UPON SINTERING (DMR-8103066 A01); 12 MONTHS \$55,300

LANDO, JEROME B; THE FORMATION AND CHARACTERIZATION OF POLYMER MULTILAYERS (DMR-8111441 A01); 12 MONTHS \$61,200

HEHEMANN, ROBERT F, AND TROIANO, ALEXANDER R; STRESS CORROSION OF STAINLESS STEELS (DMR-8111451 A01); 12 MONTHS \$72,600

HILTNER, ANNE; MOLECULAR MECHANICS OF POLYAMINO ACIDS (DMR-8113455); 12 MONTHS \$44,000

RICKERT, SCOTT E, AND LANDO, JEROME B; ACQUISITION OF OPTICAL MICROSCOPES (DMR-8118156); 12 MONTHS \$16,000

KOENIG, JACK L, AND GIBALA, RONALD; MATERIALS RESEARCH LABORATORY (DMR-8119425); 12 MONTHS \$700,000

BROWN, HUGH R; THE STRUCTURE OF CRAZES IN POLYMERS (POLYMER SCIENCE) (DMR-8121233); 12 MONTHS \$45,500

DAHM, ARNOLD J; ACQUISITION OF A COMPUTER FOR EXPERIMENTS IN CONDENSED MATTER PHYSICS (DMR-8200407); 12 MONTHS \$17,000

GIBALA, RONALD; DUCTILITY CONTROL IN BODY-CENTERED CUBIC REFRACTORY METALS (DMR-8203078); 12 MONTHS \$59,200

JAMIESON, ALEXANDER M, AND SIMHA, ROBERT; LASER LIGHT SCATTERING STUDIES OF STRUCTURE AND DYNAMICS IN BULK POLYMERS (DMR-8203663); 12 MONTHS \$85,700

KENT STATE UNIVERSITY

DOANE, J WILLIAM; LIQUID CRYSTAL SYNTHESIS (DMR-8115544); 12 MONTHS \$68,000

JOHNSON, DAVID L; THERMAL AND OPTICAL STUDY OF LIQUID CRYSTAL PHASES AND PHASE TRANSITIONS (DMR-8203773); 12 MONTHS \$73,100

SAUPE, ALFRED; PHYSICAL PROPERTIES OF AMPHIPHILIC NEMATICS (DMR-8204340); 14 MONTHS \$79,500

DOANE, J WILLIAM; NUCLEAR MAGNETIC RESONANCE STUDIES OF LIQUID CRYSTALS (DMR-8204342); 12 MONTHS \$64,100

OHIO STATE UNIVERSITY

HIRTH, JOHN P; DUCTILE FRACTURE AND HYDROGEN EMBRITTLEMENT (DMR-7815735 A03); 12 MONTHS \$84,400

EDWARDS, DAVID O; LIQUID HELIUM AT LOW TEMPERATURES (DMR-7901073 A03); 12 MONTHS \$100,000

TOUGH, JAMES T; SUPERFLUID TURBULENCE (DMR-7925089 A02*); 12 MONTHS \$49,000

WIGEN, PHILIP E; MAGNETIC RESONANCE IN FERROMAGNETIC DOMAIN WALLS (DMR-8007642 A02); 12 MONTHS \$56,000

HOAGLAND, RICHARD G; AN ANALYSIS OF MICROSTRUCTURE AND TOUGHNESS OF CERAMICS (DMR-8019340 A02); 12 MONTHS \$61,300

GARLAND, JAMES C; LOW TEMPERATURE ELECTRONIC PROPERTIES OF CONDUCTING SOLIDS (DMR-8106121 A01*); 12 MONTHS \$68,200

GAINES, JAMES R; A RESONANCE STUDY OF MOLECULAR AND ATOMIC EXCITATIONS IN THE SOLID HYDROGENS (DMR-8106166 A01); 12 MONTHS \$61,000

TANNER, DAVID B, AND EPSTEIN, ARTHUR J; INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: CONDUCTING POLYMERS: MAGNETIC, OPTICAL AND TRANSPORT STUDIES (DMR-8110422 A01*); 13 MONTHS \$44,000

READEY, DENNIS W; GASEOUS AND AQUEOUS CORROSION OF CERAMICS (DMR-8112557 A01); 12 MONTHS \$65,000

STROUD, DAVID G, AND PATTON, BRUCE R; WAVE PROPAGATION AND TRANSPORT IN HETEROGENEOUS MEDIA (DMR-8114843); 12 MONTHS \$67,000

GARLAND, JAMES C; CHARGE TRANSFER AT INTERFACES (DMR-8119368); 12 MONTHS \$400,000

RIGNEY, DAVID A; BASIC MECHANISMS OF SLIDING FRICTION AND WEAR (DMR-8120675); 12 MONTHS \$106,900

RAPP, ROBERT A; THE HOT CORROSION OF METALS AND ALLOYS BY FUSED SALTS (DMR-8203660); 12 MONTHS \$105,900

UNIVERSITY OF AKRON MAIN CAMPUS

FETTERS, LEWIS J, AND KELLEY, FRANK N; MODEL BRANCHED POLYMERS (DMR-7908299 A03); 15 MONTHS \$70,300

HARWOOD, H JAMES; CHARACTERIZATION OF POLYMER STRUCTURE (DMR-8010709 A02); 12 MONTHS \$75,000

KENNEDY, JOSEPH P; NEW MATERIALS AND PROCESSES BY CARBOCATIONIC POLYMERIZATION (DMR-8120964); 12 MONTHS \$127,900

UNIVERSITY OF CINCINNATI

MARK, JAMES E; PROPERTIES OF HIGHLY ELASTIC POLYMERIC MATERIALS (DMR-7918903 A02); 12 MONTHS \$67,900

NEWROCK, RICHARD S; SUPERCONDUCTING AND NORMAL GRANULAR METALS (DMR-7921989 A02); 12 MONTHS \$48,300

ROE, RYONG-JOO; STRUCTURAL RELAXATION IN GLASSY POLYMERS (DMR-8004236 A01); 6 MONTHS \$27,400

ACKERMAN, JEROME L, MARK, JAMES E, AND LANGLEY, NEAL R; INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: SILICONE NETWORKS AND ELASTOMERS (DMR-8118816*); 6 MONTHS \$39,300

JAYARAMAN, NARAYANAN; ACQUISITION OF ION MILLING FACILITY (DMR-8203835); 12 MONTHS \$17,500

WRIGHT STATE UNIVERSITY

DADRAS, PARVIZ, AND THOMAS, JOSEPH F; MODELING OF DEFORMATION INHOMOGENEITIES IN UPSET FORGING (DMR-8015341 A01); 12 MONTHS \$49,600

OKLAHOMA

OKLAHOMA STATE UNIVERSITY

POWELL, RICHARD C; USE OF LASER SPECTROSCOPY TECHNIQUES FOR INVESTIGATING ENERGY TRANSFER AMONG IONS IN CRYSTALS (DMR-7916152 A02); 12 MONTHS \$29,000

HALLIBURTON, LARRY E; STRUCTURE AND BEHAVIOR OF POINT DEFECTS IN ELECTRO-OPTIC MATERIALS: NIOBATES, TANTALATES, AND TUNGSTATES (DMR-8020419 A01); 12 MONTHS \$49,000

SIBLEY, WILLIAM A; OPTICAL PROPERTIES OF IMPURITIES AND RADIATION DEFECTS IN NON-CUBIC CRYSTALS (DMR-8105017 A01); 12 MONTHS \$38,500

ACKERSON, BRUCE J; STRUCTURE, DYNAMICS, AND PHASE TRANSITIONS OF SUSPENSIONS OF CHARGED POLYMER SPHERES IN EQUILIBRIUM AND NONEQUILIBRIUM STATES (DMR-8116119); 12 MONTHS \$34,500

UNIVERSITY OF OKLAHOMA NORMAN CAMPUS

FRECH, ROGER E; FAST ION CONDUCTIVITY IN MIXED CATION SULFATE CRYSTALS (DMR-8001666 A02); 17 MONTHS \$112,500

OREGON

OREGON GRADUATE CENTER

BLAKEMORE, JOHN S; DEEP-LEVEL IMPURITIES IN SEMICONDUCTORS (DMR-7916454 A02*); 12 MONTHS \$57,000

OREGON STATE UNIVERSITY

WICKMAN, H HOLLIS; MAGNETIC STUDIES OF IRON (III) BIS (DITHIOCARBAMATES) IRON (III) BIS (DISELENOCARBAMATES) (DMR-7808452 A03); 6 MONTHS \$17,900

CUTLER, MELVIN, AND GARDNER, JOHN A; ELECTRONIC PROPERTIES OF LIQUID SEMICONDUCTORS (DMR-8023682 A01); 12 MONTHS \$56,000

UNIVERSITY OF OREGON - EUGENE

DONNELLY, RUSSELL J; THE PHYSICS OF FLUIDS (DMR-8117570); 12 MONTHS \$67,000

HIGGINS, RICHARD J; ELECTRONIC PROPERTIES OF MATERIALS AND INTERFACES (DMR-8119550); 12 MONTHS \$67,500

HAYDOCK, ROGER; ELECTRONIC PROCESSES AT METAL SURFACES (DMR-8122004); 12 MONTHS \$35,400

MC CLURE, JOEL W; ELECTRONIC PROPERTIES OF CARBON FIBERS (DMR-8208599); 11 MONTHS \$16,500

PENNSYLVANIA

CARNEGIE-MELLON UNIVERSITY-CARNEGIE INSTITUTE OF TECHNOLOGY

PRINZ, FRIEDRICH B, AND WRIGHT, PAUL K; CORRELATION OF THE MECHANICAL PROPERTIES OF CERAMIC CUTTING TOOL MATERIALS WITH THE STRESS TEMPERATURE STATE IN MACHINING (DMR-8115497); 12 MONTHS \$83,300

CARNEGIE-MELLON UNIVERSITY

SEKERKA, ROBERT F; TOWARD A UNIFIED THEORY OF MORPHOLOGICAL STABILITY (DMR-7822462 A03); 12 MONTHS \$79,400

RAYNE, JOHN A; RESEARCH INTO TRANSPORT, THERMAL AND MAGNETIC PROPERTIES OF SOLIDS (DMR-7923555 A02); 12 MONTHS \$55,900

CHUNG, DEBORAH D; CALORIMETRIC STUDY OF GRAPHITE INTERCALATION COMPOUNDS (DMR-7926242 A02); 12 MONTHS \$57,500

BERRY, GUY C, AND MARKOVITZ, HERSHEL; RHEOLOGICAL PROPERTIES OF CONCENTRATED SOLUTIONS OF RODLIKE POLYMERS (DMR-8008226 A01); 12 MONTHS \$59,600

BERRY, GUY C, AND MARKOVITZ, HERSHEL; RHEOLOGICAL PROPERTIES OF CONCENTRATED SOLUTIONS OF RODLIKE POLYMERS (DMR-8008226 A02); \$2,100

MILNES, ARTHUR G; DEFECTS AND RECOMBINATION IN CADMIUM TELLURIDE (ECS-8013890 A01*); 12 MONTHS \$18,000

CASASSA, EDWARD F, AND BERRY, GUY C; INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: SOLUTIONS OF WATER-SOLUBLE POLYMERS (DMR-8023213 A01*); 12 MONTHS \$31,400

FRIEDBERG, SIMON A; MAGNETIC INTERACTIONS IN TRANSITION METAL AND RARE EARTH SALTS (DMR-8106491 A01); 12 MONTHS \$88,000

BERRY, GUY C; ACQUISITION OF COMPUTER-BASED LIGHT-SCATTERING APPARATUS (DMR-8114768); 12 MONTHS \$31,200

NAGLE, JOHN F; HYDROGEN BONDED AND BIOPHYSICAL MATERIALS (DMR-8115979); 12 MONTHS \$37,000

WYNBLATT, PAUL; THE RELATIONSHIP BETWEEN SURFACE STRUCTURE AND EQUILIBRIUM SURFACE COMPOSITION IN ALLOYS (DMR-811684); 12 MONTHS \$73,000

AARONSON, HUBERT I; SOLID-SOLID NUCLEATION (DMR-8116905); 12 MONTHS \$85,800

KOU, SINDO; HEAT FLOW AND SOLIDIFICATION DURING THE AUTOGENOUS GAS TUNGSTEN ARC WELDING OF MODERATELY-THICK ALUMINUM PLATES (DMR-8119199); 12 MONTHS \$65,300

MULLINS, WILLIAM W; THE CENTER FOR THE JOINING OF MATERIALS (DMR-8119507); 12 MONTHS \$700,000

MULLINS, WILLIAM W; THE CENTER FOR THE JOINING OF MATERIALS (DMR-8119507 A01*); \$75,000

THOMPSON, ANTHONY W; MICROMECHANISMS OF HYDROGEN CRACKING IN STRUCTURAL MATERIALS (DMR-8119540); 12 MONTHS \$82,200

BERGER, LUC; ELECTRICAL AND THERMAL TRANSPORT IN FERROMAGNETIC ALLOYS AND GLASSES (DMR-8120769); 12 MONTHS \$41,600

TIRRELL, DAVID A; DESIGN AND SYNTHESIS OF NEW REACTIVE POLYMERS (DMR-8201180); 12 MONTHS \$58,700

LEHIGH UNIVERSITY

BUTLER, SIDNEY R; INTERFACIAL SEGREGATION IN CERAMIC SYSTEMS (DMR-8006057 A02); 12 MONTHS \$68,000

WATKINS, GEORGE D; THE ELECTRONIC AND VIBRONIC STRUCTURE OF POINT DEFECTS IN COMPOUND SEMICONDUCTORS USING OPTICAL DETECTION OF MAGNETIC RESONANCE (DMR-8021065 A01); 12 MONTHS \$104,100

SMYTH, DONALD M; EFFECTS OF SINTERING CONDITIONS AND COMPOSITION ON PROPERTIES OF PEROVSKITE-STRUCTURE OXIDES (DMR-8024668 A01); 12 MONTHS \$66,000

MANSON, JOHN A, AND HERTZBERG, RICHARD W; FATIGUE CRACK PROPAGATION IN GLASSY AND MESOMORPHIC POLYMERS: EFFECTS OF STRUCTURE, COMPOSITION, AND CONDITIONS (DMR-8106489 A01); 12 MONTHS \$85,500

SPEERLING, L H; NEUTRON SCATTERING STUDIES ON DEUTERATED INTERPENETRATING POLYMER NETWORKS (DMR-8106892 A01); 12 MONTHS \$64,500

WILLIAMS, DAVID B; QUANTITATIVE MICROSTRUCTURAL CHARACTERIZATION OF ALUMINUM-LITHIUM BASED ALLOYS (DMR-8108308 A01); 12 MONTHS \$46,200

HARMER, MARTIN P; SINTERING ADDITIVES FOR CERAMIC SYSTEMS (DMR-8116845); 12 MONTHS \$63,000

GOLDSTEIN, JOSEPH I, AND WILLIAMS, DAVID B; ACQUISITION OF AN ELECTRON PROBE MICROANALYZER (DMR-8205146*); 12 MONTHS \$125,000

PENNSYLVANIA STATE UNIVERSITY

TSONG, TIEN T; SINGLE ATOM INTERACTIONS AND SURFACE SEGREGATION OF DILUTE ALLOYS USING ATOM-PROBE AND FIELD ION MICROSCOPY (DMR-7904862 A03*); 6 MONTHS \$37,300

MAYNARD, JULIAN D; SUPERFLUID HELIUM FOUR RESEARCH (DMR-7927155 A02); 12 MONTHS \$28,000

NEWMHAM, ROBERT E, AND CROSS, L E; ELASTIC HYSTERESIS AND SWITCHING IN FERROIC CRYSTALS (DMR-8010811 A02); 12 MONTHS \$67,000

PICKERING, HOWARD W; ON PREFERENTIAL REMOVAL OF A COMPONENT FROM A BINARY ALLOY (DMR-8010828 A01); 12 MONTHS \$58,100

PANTANO, CARLO G; SURFACE CHEMISTRY OF MULTICOMPONENT GLASSES (DMR-8018473 A01); 12 MONTHS \$48,000

TRESSLER, RICHARD E; MECHANICAL PROPERTIES OF DOPED ALUMINA AND MANGANESE-ZINC FERRITES (DMR-8022539 A01); 12 MONTHS \$55,000

FRANKL, DANIEL R; PHYSICAL ADSORPTION QUANTUM STATES ON SOLID SURFACES (DMR-8023225 A01); 12 MONTHS \$60,000

STUBICAN, VLADIMIR S; STRUCTURE AND PROPERTIES OF ZIRCONIA ALLOY SYSTEMS (DMR-8107143 A01); 12 MONTHS \$53,200

CUTLER, PAUL H; AN EXPERIMENTAL AND THEORETICAL INVESTIGATION OF THE ION EMISSION MECHANISM IN LIQUID METAL ION SOURCES (DMR-8108829*); 12 MONTHS \$35,000

LANNIN, JEFFREY S; RAMAN SCATTERING IN AMORPHOUS AND LIQUID SEMICONDUCTORS (DMR-8109033 A01); 12 MONTHS \$53,600

SPEAR, KARL E; MODELING THE CHEMICAL VAPOR DEPOSITION (CVD) AND TRANSPORT (CVT) OF REFRACTORY MATERIALS (DMR-8109260 A01); 12 MONTHS \$65,000

COLEMAN, MICHAEL M, AND PAINTER, PAUL C; ACQUISITION OF GAS LIQUID CHROMATOGRAPHIC/INFRARED EQUIPMENT (DMR-8110904); 12 MONTHS \$53,000

FRANKL, DANIEL R, CHAN, MOSES H, STEELE, WILLIAM A, AND COLE, MILTON W; PHYSICAL ADSORPTION (DMR-8113362*); 10 MONTHS \$117,400

ROY, RUSTUM, AND SPEAR, KARL E; ADVANCED CERAMIC PROCESSING: BASIC AND APPLIED SCIENCE (DMR-8119476); 12 MONTHS \$138,200

ALLCOCK, HARRY R; CONTROLLED SYNTHESIS OF HIGH POLYMERS (DMR-8119934); 12 MONTHS \$57,700

SMITH, DAVID; THE EFFECT OF THE HINDERED ROTATION OF THE AMMONIUM ION ON THE THERMAL EXPANSION OF ITS COMPOUNDS (DMR-8120784); 12 MONTHS \$18,000

SIMKOVICH, GEORGE; THE KINETICS OF FORMATION AND THE ELECTRICAL CONDUCTIVITY OF IRON CARBIDE (DMR-8303104); 12 MONTHS \$71,900

CHAN, MOSES H; PHASE TRANSITION STUDIES OF FLUIDS AT LOW TEMPERATURES (DMR-8206109); 12 MONTHS \$45,600

HOWELL, PAUL R; ACQUISITION OF AN ANALYTICAL ELECTRON MICROSCOPE (DMR-8206111*); 12 MONTHS \$234,100

TEMPLE UNIVERSITY

LABES, MORTIMER M; NOVEL LOW DIMENSIONAL CONDUCTORS (DMR-7905979 A02); 12 MONTHS \$64,900

MIHALISIN, TED W, AND CROW, JACK E; EXPERIMENTAL STUDIES OF MIXED VALENCE, KONDO AND ASPHERICAL COULOMB SCATTERING IN RARE EARTH INTERMETALLICS (DMR-7911153 A02); 12 MONTHS \$65,000

GUNTON, JAMES D, AND TAHIR-KHELI, RAZA; DYNAMICS OF FIRST AND SECOND ORDER PHASE TRANSITIONS (DMR-8013700 A01); 12 MONTHS \$60,000

LABES, MORTIMER M; REACTIONS IN LIQUID CRYSTALLINE PHASES (DMR-8107142 A01); 12 MONTHS \$58,100

UNIVERSITY OF PENNSYLVANIA

POPE, DAVID P, AND VITEK, VACLAV; THE EFFECTS OF DISLOCATION DISSOCIATION AND DISLOCATION CORE STRUCTURE ON PLASTIC FLOW IN PURE METALS AND ORDERED ALLOYS (DMR-7905556 A03); 12 MONTHS \$105,000

HARRIS, A B, AND LUBENSKY, T C; STATISTICAL MECHANICS AND THEORY OF SOLIDS (DMR-7910153 A02); 12 MONTHS \$83,000

WHITE, DAVID; LABORATORY FOR RESEARCH ON THE STRUCTURE OF MATTER (DMR-7923647 A04); 12 MONTHS \$3,050,000

WHITE, DAVID; LABORATORY FOR RESEARCH ON THE STRUCTURE OF MATTER (DMR-7923647 A05*); \$70,000

MC MAHON, CHARLES J; THE EFFECTS OF IMPURITIES, INCLUDING HYDROGEN, ON INTERGRANULAR COHESION IN IRON-BASED ALLOYS (DMR-8005881 A01); 12 MONTHS \$96,300

GRAHAM, WILLIAM R; HIGH RESOLUTION MICROSCOPY OF SURFACE INTERACTIONS (DMR-8009056 A02); 12 MONTHS \$65,000

WALE, WALTER; MAGNETIC RESONANCE STUDIES OF SOLITON FORMATION IN POLYACETYLENE (DMR-8009822 A01); 12 MONTHS \$50,000

GUSTAFSSON, TORNGY; HIGH RESOLUTION STRUCTURAL STUDIES OF SURFACES (DMR-8015302 A01); 12 MONTHS \$65,000

GRIFFIN, JOHN A; CRITICAL PHENOMENA IN RANDOM SYSTEMS (DMR-8015351 A02); 12 MONTHS \$56,000

LAIRD, CAMPBELL, AND FARRINGTON, GREGORY C; THE PHYSICAL AND ELECTROCHEMICAL BASIS OF FATIGUE DAMAGE (DMR-8013914 A01); 12 MONTHS \$144,500

MACDIARMID, ALAN G; ORGANIC METALS: NEW TYPES OF ORGANIC METALS DERIVED FROM POLYACETYLENE (DMR-8022870 A01); 12 MONTHS \$54,000

EGAMI, TAKESHI; LOCAL ATOMIC STRUCTURE OF AMORPHOUS ALLOYS (DMR-8100405 A01); 10 MONTHS \$86,300

PLUMMER, E WARD; VIBRATIONAL MODES AT A SURFACE (DMR-8109261 A02); 12 MONTHS \$100,000

HOCHSTRASSER, ROBIN M, AND BRONSTEIN-BONTE, IRENA Y; INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: LIGHT INDUCED PROCESSES IN THE CONDENSED PHASE (DMR-8116629*); 12 MONTHS \$88,000

PLUMMER, E WARD, AND SALANECK, WILLIAM R; INDUSTRY-UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: TIME-RESOLVED PHOTOELECTRON SPECTROSCOPY (DMR-8120381*); 12 MONTHS \$84,000

MELE, EUGENE; DYNAMICS OF PHOTOEXCITED CARRIERS IN CONJUGATED BACKBONE POLYMERS (DMR-8203484); 12 MONTHS \$25,300

BURSTEIN, ELIAS; TRAVEL SUPPORT OF U.S. SCIENTISTS TO ATTEND THE 16TH INTERNATIONAL CONFERENCE ON THE PHYSICS OF SEMICONDUCTORS; MONTPELLIER, FRANCE; SEPTEMBER 1982 (DMR-8211445*); 6 MONTHS \$7,000

POPE, DAVID P; ACQUISITION OF A UNIVERSAL MECHANICAL TESTING MACHINE (DMR-8211797); 12 MONTHS \$25,000

UNIVERSITY OF PITTSBURGH

LOWE, IRVING J; TRANSIENT NUCLEAR MAGNETIC RESONANCE STUDY OF SOLIDS (DMR-7815441 A03); 12 MONTHS \$51,800

JASNOW, DAVID M; CRITICAL PHENOMENA AND PHASE TRANSITIONS (DMR-8002416 A02); 12 MONTHS \$34,900

SOFFA, WILLIAM A; THE STRENGTH AND FATIGUE OF PRECIPITATION HARDENED ALLOYS STRENGTHENED BY MODULATED STRUCTURES (DMR-8005989 A02); 12 MONTHS \$52,400

GOLDBURG, WALTER I; LIGHT SCATTERING IN FLUIDS (DMR-8015349 A01); 12 MONTHS \$108,700

SOFFA, WILLIAM A, AND BRENNER, S S; INDUSTRY-UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: ATOM PROBE FIELD ION MICROSCOPY STUDIES OF CONTINUOUS TRANSFORMATIONS IN ALLOYS (DMR-8022255 A01*); 12 MONTHS \$70,400

MC GRUER, JAMES N, CHOYKE, W J, TOWNSEND, JOHN R, AND SPITZNAGEL, J A; MICROSTRUCTURES EVOLVING DURING ION IMPLANTATION (DMR-8102968 A01); 12 MONTHS \$273,000

BLACHER, JEAN R; ACQUISITION OF A SCANNING ELECTRON MICROSCOPE-ELECTRON MICROPROBE (DMR-8106170 A01*); \$35,000

MAGILL, JOSEPH H; CONFORMATION OF MACROMOLECULES IN THE CONDENSED STATE (DMR-8113089 A01); 12 MONTHS \$58,300

RHODE ISLAND

BROWN UNIVERSITY

TAUC, JAN; OPTICAL STUDIES OF ELECTRONIC STATES, VIBRATIONS AND RELAXATION PROCESSES IN AMORPHOUS SYSTEMS (DMR-7909819 A02); 12 MONTHS \$80,300

STILES, PHILLIP J; SURFACE QUANTIZATION AND ELECTRON-ELECTRON INTERACTIONS (DMR-7913787 A02); 12 MONTHS \$76,000

HOUGHTON, ANTHONY; SOLID STATE AND MANY-BODY THEORY (DMR-7920321 A02); 12 MONTHS \$36,900

HELLER, GERALD S; MATERIALS RESEARCH LABORATORY (DMR-7923257 A02; 12 MONTHS \$1,800,000)

WOLD, AARON; PREPARATION AND PROPERTIES OF NEW TRANSITION METAL CHALCOGENIDES (DMR-7923605 A02; 12 MONTHS \$56,700)

ESTRUP, PEDER J; SURFACE RECONSTRUCTION OF TRANSITION METALS (DMR-7924396 A02; 12 MONTHS \$64,000)

ASARO, ROBERT J; FUNDAMENTAL STUDIES OF LOCALIZED PLASTIC DEFORMATION (DMR-7926190 A02; 12 MONTHS \$38,900)

BRAY, PHILIP J; NUCLEAR MAGNETIC RESONANCE STUDIES OF THE STRUCTURE OF GLASSES (DMR-8004488 A02; 12 MONTHS \$68,000)

FELCOVITS, ROBERT A; CRITICAL PHENOMENA IN THIN FILMS, AMORPHOUS SYSTEMS AND METALS (DMR-8005879 A02; 12 MONTHS \$34,600)

ELBAUM, CHARLES; HIGH FREQUENCY ULTRASONIC WAVE AND PHONON PROPAGATION IN CONDENSED MATTER (DMR-8011284 A02; 12 MONTHS \$120,200)

SEIDEL, GEORGE M; EXPERIMENTS ON ATOMIC HYDROGEN BELOW 1 DEGREE KELVIN (DMR-8105328 A01; 12 MONTHS \$92,000)

QUINN, JOHN J; COLLECTIVE MODES AND ULTRASOUND GENERATION IN SEMICONDUCTING SPACE CHARGE LAYERS (DMR-8121069; 12 MONTHS \$36,000)

WOLD, AARON, AND BAGLIO, JOSEPH; INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: PREPARATION AND CHARACTERIZATION OF NEW SEMICONDUCTOR CHALCOGENIDES FOR POTENTIAL SOLAR CELL APPLICATIONS (DMR-8203667*; 12 MONTHS \$20,000)

GORDON RESEARCH CONFERENCES

CRUCKSHANK, ALEXANDER M, AND LONGO, JOHN M; A GORDON CONFERENCE ON SOLID STATE CHEMISTRY, WOLFEBORO, NEW HAMPSHIRE, JULY 26-30, 1982 (DMR-8118885; 9 MONTHS \$3,000)

UNIVERSITY OF RHODE ISLAND

BONNER, JILL C; MOSTLY ONE DIMENSIONAL MAGNETISM (DMR-8010819 A02; 12 MONTHS \$31,700)

NORTHBY, JAN A; CHARGED HELIUM DROPLET BEAMS (DMR-8024366 A01; 12 MONTHS \$53,900)

NUNES, ANTHONY C; A NEUTRON SCATTERING STUDY OF FERROFLUID PARTICLES (DMR-8024662 A01; 12 MONTHS \$39,200)

PICKART, STANLEY J, AND MCGUIRE, THOMAS R; INDUSTRY-UNIVERSITY COOPERATIVE RESEARCH: STRUCTURAL, MAGNETIC AND TRANSPORT PROPERTIES OF AMORPHOUS MAGNETIC ALLOYS (DMR-8207078*; 12 MONTHS \$41,500)

SOUTH CAROLINA

CLEMSON UNIVERSITY

SKOVE, MALCOLM J, AND STILLWELL, E P; RESEARCH IN METALLIC WHISKERS (DMR-8008351 A03; 12 MONTHS \$43,000)

TENNESSEE

OKA RIDGE NATIONAL LABORATORY

KOEHLE, WALTER C, AND HENDRICKS, ROBERT W; THE OPERATION OF THE NATIONAL CENTER FOR SMALL-ANGLE SCATTERING RESEARCH (DMR-8020167 A02*; 12 MONTHS \$500,000)

KOEHLE, WALTER C; OPERATION OF THE NATIONAL CENTER FOR SMALL ANGLE SCATTERING RESEARCH (DMR-8020167 A03*; \$50,000)

UNIVERSITY OF TENNESSEE AT KNOXVILLE

FELLERS, JOHN F, AND WHITE, JAMES L; ORIENTATION, MORPHOLOGY, AND MECHANICAL PROPERTIES OF POLYMERIC GLASSES (DMR-8026051 A01; 12 MONTHS \$58,500)

VANDERBILT UNIVERSITY

WERT, JAMES J; THE ROLE OF STRUCTURE IN THE WEAR PROCESS (DMR-8017301 A02; 12 MONTHS \$60,000)

HAHN, GEORGE T; ANALYSIS OF ROLLING CONTACT FRACTURE AND RIM LIFE (DMR-8108500; 12 MONTHS \$89,100)

BAYUZICK, ROBERT J; ACQUISITION OF A SCANNING ELECTRON MICROSCOPE (DMR-8204322; 12 MONTHS \$80,000)

TEXAS

NORTH TEXAS STATE UNIVERSITY

DUGGAN, JEROME L; SEVENTH CONFERENCE ON THE APPLICATION OF ACCELERATORS IN RESEARCH AND INDUSTRY; DENTON, TEXAS; NOVEMBER 1-3, 1982 (29Y-8120733*; 12 MONTHS \$2,000)

RICE UNIVERSITY

ESTLE, THOMAS L, AND DODDS, STANLEY A; MUON SPIN ROTATION STUDIES OF DEFECTS, DIFFUSION AND TRAPPING IN SOLIDS (DMR-7909223 A02; 12 MONTHS \$82,000)

TRAMMELL, GEORGE T, AND HANNON, JAMES P; THEORETICAL STUDIES IN GAMMA-RAY AND NEUTRON DIFFRACTION (DMR-8015706 A01; 12 MONTHS \$44,500)

PHARR, GEORGE M; A FUNDAMENTAL STUDY OF LIQUID PHASE ENHANCED CREEP (DMR-8204770*; 12 MONTHS \$55,800)

TEXAS A & M UNIVERSITY

FRY, EDWARD S, AND NAUGLE, DONALD G; VELOCITY RESOLVED SCATTERING OF ATOMIC HYDROGEN FROM SURFACES (DMR-7921594 A01; 12 MONTHS \$34,500)

PARPIA, JEEVAK M; HYDRODYNAMIC AND MAGNETIC PROPERTIES OF LIQUID HELIUM-3 IN CONFINED GEOMETRIES (DMR-8018381 A01; 12 MONTHS \$47,000)

CLEARFIELD, ABRAHAM; THE PREPARATION AND CHARACTERIZATION OF SUPERION CONDUCTORS OF GROUP (IV) TRIPHOSPHATES AND SILICOPHOSPHATES (DMR-8025184 A01; 12 MONTHS \$56,800)

NAUGLE, DONALD G; EXPERIMENTAL STUDIES OF SUPERCONDUCTIVITY AND ELECTRON TRANSPORT IN AMORPHOUS METALS (DMR-8121439; 12 MONTHS \$72,000)

HU, CHIA-REN; THEORETICAL INVESTIGATION OF SOME NOVEL PHASES IN FERROMAGNETIC SUPERCONDUCTORS (DMR-8205697; 12 MONTHS \$29,600)

KIRK, WILEY P; LOW TEMPERATURE INVESTIGATIONS OF NUCLEAR-SPIN-ORDERING, QUANTIZED HALL CONDUCTANCE, AND THERMOELECTRIC EFFECTS IN LOW TO MODERATELY STRONG MAGNETIC FIELDS (DMR-8205502; 12 MONTHS \$55,000)

SASLOW, WAYNE M; HYDRODYNAMICS OF SPIN GLASSES (DMR-8209577; 12 MONTHS \$25,700)

UNIV OF TEXAS AT ARLINGTON

COLEMAN, PAUL G, SHARMA, SURESH C, AND DIANA, LEONARD M; THE SIXTH INTERNATIONAL CONFERENCE ON POSITRON ANNIHILATION; ARLINGTON, TEXAS, APRIL 3-7, 1982 (DMR-8113227*; 12 MONTHS \$5,700)

UNIV OF TEXAS AT AUSTIN

THOMPSON, JAMES C; THE METAL-NONMETAL TRANSITION IN LIQUID MIXTURES (DMR-7821744 A03; 6 MONTHS \$17,500)

GAVENTA, J D; ANOMALOUS SOUND PROPAGATION IN METALS (DMR-7825232 A03; 6 MONTHS \$31,700)

SWINNEY, HARRY L; INSTABILITIES, TURBULENCE, AND CRITICAL PHENOMENA IN FLUID FLOWS (MEA-7908585 A02*; 12 MONTHS \$30,000)

ERSKINE, JAMES L; EXPERIMENTAL STUDIES OF INTRINSIC SURFACE ELECTRONIC PROPERTIES (DMR-7923629 A02; 10 MONTHS \$30,000)

STEINFINK, HUGO; RELATION BETWEEN STRUCTURE AND PHYSICAL PROPERTIES IN MIXED VALENCE TRANSITION METAL CHALCOGENIDES (DMR-8005140 A01; 5 MONTHS \$5,100)

WEBBER, STEPHEN E; ENERGY-TRANSPORT PROCESSES IN POLYMERS (DMR-8013709 A01; 12 MONTHS \$38,000)

KLEINMAN, LEONARD; BULK AND SURFACE ELECTRONIC STRUCTURE OF SOLIDS (DMR-8019518 A01; 12 MONTHS \$57,000)

BOURELL, DAVID L; STRENGTHENING MECHANISMS OF WARM-ROLLED FERROUS MATERIALS (DMR-8113087; 12 MONTHS \$46,000)

DE WETTE, FREDERIK W; CALCULATIONS OF SURFACE PROPERTIES OF CRYSTALS (DMR-8121916; 12 MONTHS \$25,900)

UNIVERSITY OF HOUSTON CENTRAL CAMPUS

MC CAULEY, JOSEPH L; VORTEX CREATION AND ANNIHILATION IN THIN HELIUM-FOUR FILMS (DMR-8003421 A02; 6 MONTHS \$9,000)

RABALAIS, J WAYNE; CHEMICAL REACTIONS OF ACTIVE ION BEAMS WITH SURFACES (DMR-8007036 A02; 12 MONTHS \$82,700)

CHU, CHING-WU; HIGH PRESSURE STUDY OF SOLIDS WITH UNUSUAL PROPERTIES (DMR-8204173; 12 MONTHS \$78,000)

UTAH

UNIVERSITY OF UTAH

ROSENBERGER, FRANZ; CRYSTAL GROWTH FROM VAPORS (DMR-7913183 A03; 12 MONTHS \$57,400)

SYMKO, OREST G; PROPERTIES OF DILUTE MAGNETIC ALLOYS AT VERY LOW TEMPERATURES AND NUCLEAR COOLING (DMR-7916243 A02; 12 MONTHS \$43,000)

DE VRIES, K L; MOLECULAR AND MACROSCOPIC INVESTIGATION OF FRACTURE IN POLYMERS (DMR-7925390 A02; 12 MONTHS \$62,900)

DE VRIES, K L; MOLECULAR AND MACROSCOPIC INVESTIGATION OF FRACTURE IN POLYMERS (DMR-7925390 A03; \$8,000)

LYMAN, DONALD J; POLYMERIC IMPLANT MATERIALS (DMR-8005499 A02; 12 MONTHS \$90,000)

BOYD, RICHARD H; RELAXATION MECHANISMS IN CRYSTALLINE POLYMERS (DMR-8018326 A01; 12 MONTHS \$59,900)

PLICHTA, MARK R; THE EFFECTS OF INTERPHASE BOUNDARY STRUCTURE OF THE KINETICS OF PRECIPITATE COARSENING (DMR-8022797 A01; 12 MONTHS \$59,900)

LUTY, FRITZ; LOCALIZED AND COLLECTIVE EXCITATION AND ORDERING PROCESSES IN IONIC AND MOLECULAR CRYSTALS (DMR-8105332 A01; 12 MONTHS \$100,000)

PHILLIPS, PAUL J; CRYSTALLIZATION OF POLYMERS AT ELEVATED PRESSURES (DMR-8106033 A01; 12 MONTHS \$50,000)

MATTIS, DANIEL C; THEORY OF CONDENSED MATTER PHYSICS (DMR-8106223 A01; 12 MONTHS \$42,000)

PLICHTA, MARK R, AND PHILLIPS, PAUL J; ACQUISITION OF SCANNING TRANSMISSION ELECTRON MICROSCOPE (DMR-8205574*; 12 MONTHS \$202,000)

UTAH STATE UNIVERSITY

HANSEN, WILFORD N; INTERNATIONAL CONFERENCE ON THE ELECTRONIC AND MOLECULAR STRUCTURE OF ELECTRODE-ELECTROLYTE INTERFACES; UTAH STATE UNIVERSITY; JULY 25-30, 1982 (CHE-8151462*; 6 MONTHS \$3,000)

VIRGINIA

COLLEGE OF WILLIAM AND MARY

KOSSLER, W J, AND PETZINGER, KENNETH G; MUON PRECESSION IN SOLIDS (DMR-8007059 A02; 12 MONTHS \$61,000)

KRAKAUER, HENRY; ELECTRONIC STRUCTURE OF D-BAND METAL SURFACES AND ADSORBED OVERLAYERS (DMR-8120550; 12 MONTHS \$20,000)

UNIVERSITY OF VIRGINIA

SCHNATTERLY, STEPHEN E; INELASTIC ELECTRON SCATTERING AND SOFT X-RAY SPECTROSCOPY (DMR-7816753 A04; 12 MONTHS \$54,200)

BRYAN, ROBERT F. CRYSTAL STRUCTURE AND LIQUID CRYSTALLINITY (DMR-7819884 A04); 6 MONTHS \$20,000

FOWLER, MICHAEL. THEORY OF SPIN CHAINS (MATERIALS RESEARCH) (DMR-8106108 A01); 12 MONTHS \$18,000

HESS, GEORGE B. PHASE TRANSITIONS IN PHYSISORBED FILMS (DMR-8116922); 12 MONTHS \$53,000

POON, SIU J. SYNTHESIS AND PROPERTIES OF LIQUID QUENCHED METASTABLE AND AMORPHOUS RIBBONS AT VARIABLE SUBSTRATE TEMPERATURE (DMR-8202624); 12 MONTHS \$45,000

DEAVER, BASCOM S. SUPERCONDUCTING ELECTRONICS: PARTICLES, MICROSTRUCTURES AND SQUIDS (DMR-8204365); 12 MONTHS \$51,900

VIRGINIA COMMONWEALTH UNIVERSITY

SATTERTHWAITE, CAMERON B. BUTLER, CHARLES T. AND DOIRON, THEODORE D. LOW TEMPERATURE STUDIES OF METAL HYDRIDES (DMR-8108293 A01); 12 MONTHS \$52,000

JENA, PURUSOTTA M. AND SATTERTHWAITE, CAMERON B. INTERNATIONAL SYMPOSIUM ON ELECTRONIC STRUCTURE AND PROPERTIES OF HYDROGEN IN METALS, RICHMOND, VIRGINIA; MARCH 4-6, 1982 (DMR-8115491*); 6 MONTHS \$3,000

VIRGINIA POLYTECHNIC INSTITUTE

ITTER, ALFRED L. ELECTRONIC STRUCTURE OF GRAPHITE, CRYSTALLINE SILICON AND AMORPHOUS SILICON BY (E,2E) SPECTROSCOPY (DMR-8204080); 12 MONTHS \$53,700

WASHINGTON

BOEING ENGINEERING AND CONSTRUCTION

LYTLE, FARREL W. ATOMIC AND ELECTRONIC STRUCTURE OF GLASS BY X-RAY TECHNIQUES (DMR-8013706 A02); 12 MONTHS \$92,215

UNIVERSITY OF WASHINGTON

INGALLS, ROBERT L. GAMMA-RAY AND X-RAY SPECTROSCOPY OF SOLIDS UNDER PRESSURE (DMR-7824995 A03); 12 MONTHS \$57,400

RIEDEL, EBERHARD K. SCHICK, MICHAEL, AND THOULESS, DAVID J. THEORETICAL RESEARCH IN STATISTICAL MECHANICS (DMR-7920785 A02); 12 MONTHS \$186,000

FAIN, SAMUEL C. STRUCTURE OF PHYSICALLY ADSORBED LAYERS (DMR-8006334 A02); 12 MONTHS \$63,000

STERN, EDWARD A. EXTENDED X-RAY ABSORPTION FINE STRUCTURE (DMR-8022221 A01); 12 MONTHS \$115,000

VILCHES, OSCAR E. AND FORTSON, NORVAL. THERMAL PROPERTIES OF SPIN POLARIZED QUANTUM SYSTEMS (DMR-8022239 A01); 12 MONTHS \$71,000

WHITTEMORE, O. J. AND HALSEY, GEORGE D. INITIAL SINTERING AND PHYSICAL ADSORPTION (DMR-8111111 A01); 12 MONTHS \$52,600

SEFERIS, JAMES C. AND VASSILATOS, GEORGE. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: A STRUCTURAL APPROACH TO CRYSTALLINE POLYMER ANISOTROPIC SOLID-STATE PROPERTIES (DMR-8113239 A01*); \$36,900

SCOTT, WILLIAM D. ACQUISITION OF ION BEAM THINNER (DMR-8114765*); 12 MONTHS \$10,000

DASH, JAY G. AND VILCHES, OSCAR E. MONOLAYER PHYSICS (DMR-8116421); 11 MONTHS \$148,000

REHR, JOHN J. X-RAY ADSORPTION AND DIFFERENTIAL APPROXIMANTS IN THE THEORY OF PHASE TRANSITIONS (DMR-8207357); 12 MONTHS \$36,100

WASHINGTON STATE UNIVERSITY

FARMER, BARRY L. ENERGETICS OF POLYMER CRYSTALLIZATION (DMR-7720604 A03); 6 MONTHS \$6,500

BRAUNLICH, PETER F. MEASUREMENT OF MULTIPHOTON ABSORPTION CROSS SECTIONS IN WIDE-GAP MATERIALS (DMR-8107099); 12 MONTHS \$44,200

HIPPS, KERRY W. INELASTIC ELECTRON TUNNELING SPECTROSCOPY: BARRIER CHARACTERIZATION AND ADSORBED SPECIES (DMR-8115978); 12 MONTHS \$106,300

CROSBY, GLENN A. SPECTROSCOPIC INVESTIGATIONS OF MONOMERIC AND DIMERIC COMPLEXES OF RHODIUM(I) AND IRIIDIUM(I) (CHE-8119060*); 12 MONTHS \$69,000

WEST VIRGINIA

WEST VIRGINIA UNIVERSITY

SEEHRA, MOHINDAR S. MAGNETIC, OPTICAL AND DIELECTRIC STUDIES OF TRANSITIONMETAL-OXIDES (DMR-8106620 A01); 12 MONTHS \$34,000

COOPER, BERNARD R. THEORY OF LIGHT ACTINIDE AND RARE EARTH MAGNETISM (DMR-8204261); 12 MONTHS \$45,000

WISCONSIN

UNIVERSITY OF WISCONSIN-MADISON

CHANG, Y. AUSTIN; THERMODYNAMICS AND PHASE RELATIONSHIPS OF BINARY AND TERNARY METAL-SULFUR SYSTEMS (DMR-7804066 A04); 12 MONTHS \$89,400

WEAVER, JOHN H. PHOTOELECTRON SPECTROSCOPY STUDIES OF TRANSITION METAL CARBIDES USING SYNCHROTRON RADIATION (DMR-7821080 A03); 6 MONTHS \$22,100

LAGALLY, MAX G. CRYSTALLOGRAPHIC DETERMINATION OF LIMITATIONS TO ORDER IN SURFACES AND OVERLAYERS (DMR-7825754 A03); 12 MONTHS \$86,300

CHANG, Y. AUSTIN; INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: PHASE INVESTIGATION OF LEAD-TIN-CALCIUM ALLOYS (DMR-7908333 A02*); 12 MONTHS \$41,700

YU, HYUK. SMALL ANGLE NEUTRON SCATTERING OF RUBBER NETWORKS (DMR-7906652 A03); 12 MONTHS \$59,000

PEREPEZKO, JOHN H. NUCLEATION KINETICS AND THERMODYNAMICS OF THE LIQUID-SOLID TRANSFORMATION (DMR-7915805 A02); 12 MONTHS \$65,200

PEREPEZKO, JOHN H. NUCLEATION KINETICS AND THERMODYNAMICS OF THE LIQUID-SOLID TRANSFORMATION (DMR-7915802 A03); 12 MONTHS \$73,100

BRUCH, LUDWIG W. THEORY OF PHYSICAL ADSORPTION (DMR-7920400 A02); 12 MONTHS \$32,700

TAYLOR, JAMES W. MARGARITONDO, GIORGIO, AND FISHER, GALEH B. GAS PHASE AND ULTRAHIGH VACUUM SPECTROSCOPY ON A WINDOWLESS BEAM LINE (DMR-7924555 A02); \$45,000

SCHRAG, JOHN L. MOTIONS AND CONFORMATIONAL PROPERTIES OF MACROMOLECULES IN SOLUTION (DMR-7925020 A02); 12 MONTHS \$96,900

ROWE, EDNOR M. AND PRUETT, CHARLES H. THE IMPLEMENTATION OF SOFT X-RAY BEAMLINES ON THE ALADDIN STORAGE RING AT THE SYNCHROTRON RADIATION CENTER (DMR-8013703 A01); 12 MONTHS \$160,000

ROWE, EDNOR M. OPERATION OF ALADDIN (DMR-8020164 A02); 12 MONTHS \$1,250,000

COOPER, STUART L. INTERMOLECULAR BONDING AND MICROPHASE SEPARATION IN POLYURETHANE BLOCK POLYMERS (DMR-8106888 A01); 12 MONTHS \$59,800

WEBB, MAURICE B. SURFACE STRUCTURES, LATTICE DYNAMICS AND ADATOM INTERACTIONS (DMR-8114843); 12 MONTHS \$70,000

FERRY, JOHN D. MOLECULAR MOTIONS IN POLYMER SOLUTIONS, GELS, AND NETWORKS (DMR-8115462); 12 MONTHS \$55,200

YEN, WILLIAM M. SPECTROSCOPY OF MAGNETICALLY ORDERED MATERIALS (DMR-8116733); 12 MONTHS \$96,000

LIN, CHUN C. BAND STRUCTURE OF SOLIDS AND POINT DEFECTS IN CRYSTALS (DMR-8119461); 12 MONTHS \$55,000

MARGARITONDO, GIORGIO. THE MICROSCOPIC PROPERTIES OF SEMICONDUCTOR-SEMICONDUCTOR INTERFACES (DMR-8200518); 12 MONTHS \$61,800

HUBER, DAVID L. MAGNETIC PROPERTIES OF SOLIDS (DMR-8203704); 12 MONTHS \$44,300

WRIGHT, JOHN C. POINT DEFECT EQUILIBRIA BY LASER SPECTROSCOPY (DMR-8205145); 16 MONTHS \$89,800

LAGALLY, MAX G. DEVELOPMENT OF A HIGH-RESOLUTION ELECTRON DIFFRACTOMETER FOR SURFACE STRUCTURAL STUDIES (DMR-8207225); 2 MONTHS \$29,000

UNIVERSITY OF WISCONSIN-MILWAUKEE

GREENLER, ROBERT. ADSORPTION AND REACTIONS ON METAL SURFACES (DMR-8010710 A02); 12 MONTHS \$55,000

TONG, S. Y. PHOTOEMISSION STUDIES OF ADSORBATES ON DISORDERED AND STEPPED SURFACES (DMR-8101203 A01); 12 MONTHS \$59,000

COMPUTER SCIENCE

ALASKA

UNIVERSITY OF ALASKA FAIRBANKS CAMPUS

HEAD, THOMAS J. CODES IN FORMAL LANGUAGE THEORY (COMPUTER SCIENCE) (MCS-8003348 A01); 12 MONTHS \$28,832

ARIZONA

UNIVERSITY OF ARIZONA

GRISWOLD, RALPH E. HIGH-LEVEL PROGRAMMING LANGUAGE FACILITIES FOR DATA STRUCTURE PROCESSING (MCS-8101916 A01); \$13,172

GRISWOLD, RALPH E. HIGH-LEVEL PROGRAMMING LANGUAGE FACILITIES FOR DATA STRUCTURE PROCESSING (MCS-8101916 A02); 12 MONTHS \$73,219

BUDD, TIMOTHY A. SOFTWARE TESTING (MCS-8109547 A01); 12 MONTHS \$61,158

ANDREWS, GREGORY R. THE DESIGN AND ANALYSIS OF DISTRIBUTED PROGRAMS (MCS-8202869*); 24 MONTHS \$197,521

MYERS, EUGENE W. THE DESIGN AND ANALYSIS OF A PRACTICAL AND PRECISE INTERPROCEDURAL DATA FLOW ANALYSIS SYSTEM (MCS-8210096); 24 MONTHS \$49,852

MILLER, WEBB C. TOOLPACK AT THE UNIVERSITY OF ARIZONA, A SET OF SOFTWARE TOOLS (MCS-8210722); 12 MONTHS \$52,317

CALIFORNIA

MATHEMATICAL SCIENCES RESEARCH INSTITUTE INC

CHERN, SHING-SH. MOORE, CALVIN C. AND SINGER, ISADORE M. A MATHEMATICAL SCIENCES RESEARCH INSTITUTE: PHASE II (MCS-8120790 A02*); \$72

RAND CORPORATION

HEARN, ANTHONY C. CSNET PHONENET OPERATIONS AND MMDP DEVELOPMENT (MCS-8109321 A01); 12 MONTHS \$96,822

SRI INTERNATIONAL

LAMPORT, LESLIE. THE SPECIFICATION AND VERIFICATION OF CONCURRENT PROGRAMS (MCS-8104459 A01); 12 MONTHS \$98,126

WALDINGER, RICHARD J. THE AUTOMATIC SYNTHESIS OF COMPUTER PROGRAMS (MCS-8105545); 12 MONTHS \$74,227

GROSZ, BARBARA J. A PROBLEM-SOLVING APPROACH TO THE DESIGN OF NATURAL LANGUAGE UTTERANCES (MCS-8115105); 12 MONTHS \$84,117

GOGUEN, JOSEPH A; EXCEPTIONS AND NON-TERMINATION FOR ABSTRACT DATA TYPES-PARTIAL AND CONTINUOUS ALGEBRAS (COMPUTER RESEARCH) (MCS-8201380*); 24 MONTHS \$97,881

STANFORD UNIVERSITY

KNUTH, DONALD E; ANALYSIS OF ALGORITHMS (MCS-7729738 A04); 12 MONTHS \$204,439

GOLUB, GENE H, WILKINSON, JAMES H, AND DAHLQUIST, GERMUND G; NUMERICAL LINEAR ALGEBRA (MCS-7811985 A05); 12 MONTHS \$119,965

MANNA, ZOHAR; A DEDUCTIVE APPROACH TO PROGRAM SYNTHESIS (COMPUTER SCIENCE) (MCS-7909495 A02); 12 MONTHS \$66,000

HELLMAN, MARTIN E; DATA SECURITY (ECS-7916161 A03*); 12 MONTHS \$14,000

DANTZIG, GEORGE B, COTTE, RICHARD W, AND MURRAY, WALTER; COMPUTER OPTIMIZATION OF COMPLEX SYSTEMS (MCS-7926009 A02); 12 MONTHS \$126,002

GOODMAN, JOSEPH W, AND MACOVSKI, ALBERT; INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH PROJECT: THREE DIMENSIONAL VISUALIZATION OF COMPUTERIZED TOMOGRAPHY IMAGES (ECS-7926432 A02*); 12 MONTHS \$30,867

LUCKHAM, DAVID C, AND OWICKI, SUSAN S; SPECIFICATIONS METHODS FOR PARALLEL PROGRAMS (COMPUTER RESEARCH) (MCS-8015336 A01); 12 MONTHS \$79,000

FEIGENBAUM, EDWARD A, BUCHANAN, BRUCE G, KEDES, LAWRENCE H, AND BRUTLAG, DOUGLAS L; MOLGEN: A COMPUTER SCIENCE APPLICATION TO MOLECULAR BIOLOGY (ECS-8016247 A02*); 12 MONTHS \$44,273

MCCARTHY, JOHN; BASIC RESEARCH IN ARTIFICIAL INTELLIGENCE (MCS-8104877 A01); 12 MONTHS \$74,000

WINOGRAD, TERRY; DEVELOPMENT OF A LANGUAGE FOR PROCESS DESCRIPTION (MCS-8104883); 24 MONTHS \$113,812

MANNA, ZOHAR; TEMPORAL VERIFICATION AND SYNTHESIS OF CONCURRENT PROGRAMS (COMPUTER RESEARCH) (MCS-8111586 A01); 12 MONTHS \$53,252

FEIGENBAUM, EDWARD A; THE AUTOMATION OF SCIENTIFIC INFERENCE: HEURISTIC COMPUTING APPLIED TO PROTEIN CRYSTALLOGRAPHY (MCS-8117300); 12 MONTHS \$45,782

GOLUB, GENE H; RESEARCH WORKSHOP IN NUMERICAL METHODS; JUNE 14-18, 1982 (INT-8117980*); 6 MONTHS \$2,500

MCCLUSKEY, EDWARD J; RELIABLE COMPUTERS (MCS-8200129); 12 MONTHS \$84,186

ULLMAN, JEFFREY D; THEORETICAL INVESTIGATIONS INTO VERY LARGE SCALE INTEGRATED CIRCUIT TECHNOLOGY (COMPUTER RESEARCH) (MCS-8203405); 12 MONTHS \$53,671

IGLEHART, DONALD L; SIMULATION OUTPUT ANALYSIS FOR LOCAL COMPUTER NETWORKS (MCS-8203483*); 12 MONTHS \$49,157

PRATT, VAUGHAN R; LOGICAL METHODS FOR PROGRAM ANALYSIS (MCS-8205451); 12 MONTHS \$60,746

MCCARTHY, JOHN; MECHANICAL THEOREM PROVING AND DEVELOPMENT OF EKL - AN INTERACTIVE PROOF CHECKING SYSTEM (COMPUTER RESEARCH) (MCS-8206565); 12 MONTHS \$119,248

PERRY, JOHN R; COMPUTATIONAL ASPECTS OF SITUATION SEMANTICS (COMPUTER RESEARCH) (MCS-8211902*); 24 MONTHS \$46,196

UNIVERSITY OF CALIFORNIA, BERKELEY

GRAHAM, SUSAN L; PROGRAMMING LANGUAGE IMPLEMENTATION (MCS-8005144 A02); 12 MONTHS \$65,850

KARP, RICHARD M; COMBINATORIAL ALGORITHMS AND COMPUTATIONAL COMPLEXITY (COMPUTER RESEARCH) (MCS-8105217 A01); 12 MONTHS \$88,612

RAMAMOORTHY, C V; REDUCING COMMUNICATION COSTS IN DISTRIBUTED SYSTEMS (MCS-8107140); 24 MONTHS \$58,000

SMITH, ALAN J; AUTOMATIC FILE AND I/O SYSTEM DESIGN AND OPTIMIZATION (MCS-8202591); 12 MONTHS \$65,000

BLUM, MANUEL; TRANSACTION PROTECTION PROTOCOLS (COMPUTER RESEARCH) (MCS-8204506); 12 MONTHS \$74,450

UNIVERSITY OF CALIFORNIA, IRVINE

DANZIGER, JAMES N, AND KRAEMER, KENNETH L; A CONTINGENCY ANALYSIS OF COMPUTER IMPACTS IN PUBLIC ORGANIZATIONS (MCS-7905521 A02); 12 MONTHS \$71,639

FREEMAN, PETER A; SOFTWARE CONSTRUCTION USING COMPONENTS (ECS-8103718 A01); 12 MONTHS \$52,002

KRAEMER, KENNETH L; LONGITUDINAL STUDY OF COMPUTER TECHNOLOGY AND IMPACTS IN CITIES (MCS-8115547*); 24 MONTHS \$120,000

BIC, LUBOMIR; DATAFLOW DATABASES (COMPUTER RESEARCH) (MCS-8117516); 24 MONTHS \$38,140

KLING, ROB; SOCIAL DYNAMICS OF COMPUTER USE IN COMPLEX ORGANIZATIONS (MCS-8117719); 12 MONTHS \$85,143

KLING, ROB; SOCIAL DYNAMICS OF COMPUTER USE IN COMPLEX ORGANIZATIONS (MCS-8117719 A01); \$25,002

HIRSCHBERG, DANIEL S; PARALLEL ALGORITHMIC TECHNIQUES (MCS-8200362); 24 MONTHS \$31,435

UNIVERSITY OF CALIFORNIA, LOS ANGELES

PEARL, JUDEA; STUDIES IN HEURISTICS (MCS-8114209); 12 MONTHS \$53,164

ESTRIN, GERALD, AVIZIENIS, ALGIRDAS A, KLEINROCK, LEONARD, AND POPEK, GERALD J; AN ADVANCED NETWORK ENVIRONMENT FOR DISTRIBUTED SYSTEMS RESEARCH (MCS-8121696); 12 MONTHS \$850,552

UNIVERSITY OF CALIFORNIA, SAN DIEGO

HU, TE CHIANG; THEORY AND COMPUTATION OF DISCRETE OPTIMIZATION (MCS-8003362 A03); 12 MONTHS \$30,035

FREDMAN, MICHAEL L; THE COMPLEXITY OF DATA STRUCTURES AND RELATED TOPICS (COMPUTER RESEARCH) (MCS-8204031); 24 MONTHS \$56,686

HOWDEN, WILLIAM E; DESIGN BASED PROGRAM TESTING AND ANALYSIS (COMPUTER RESEARCH) (MCS-8204243); 24 MONTHS \$74,065

UNIVERSITY OF CALIFORNIA, SANTA BARBARA

BOOK, RONALD V; COMPUTATIONAL COMPLEXITY AND FORMAL LANGUAGES (MCS-8011979 A04); \$13,214

UNIVERSITY OF SOUTHERN CALIFORNIA

BALZER, ROBERT M, AND WILE, DAVID; SUPERVISORY CONTROL OF TRANSFORMATIONAL IMPLEMENTATION SYSTEMS (MCS-7918792 A02*); 12 MONTHS \$241,410

GINSBURG, SEYMOUR; MATHEMATICAL FOUNDATIONS OF DATABASES (MCS-7925004 A01); 24 MONTHS \$96,959

PROSKUROWSKI, WLODEK; FAST NUMERICAL METHODS FOR SOLVING THE HELMHOLTZ EQUATION AND RELATED PROBLEMS (MCS-8003382 A01); 24 MONTHS \$27,657

ADLEMAN, LEONARD; COMPUTATION COMPLEXITY AND ITS RELATIONSHIP TO NUMBER THEORY (COMPUTER RESEARCH) (MCS-8002533 A02); 12 MONTHS \$42,982

BREUER, MELVIN A; TESTING METHODOLOGIES FOR COMPLEX DIGITAL SYSTEMS (MCS-8203485); 24 MONTHS \$122,964

BLUM, EDWARD K; ALGEBRAIC APPROACHES TO PROGRAMMING CONCEPTS AND THEIR SEMANTICS (MCS-8203666); 24 MONTHS \$91,029

COLORADO

COLORADO STATE UNIVERSITY

PRENTER, P M; ADAPTIVE AND NON-ADAPTIVE DATA COMPRESSION WITH APPLICATIONS TO RADIOMETRIC REMOTE SENSING (COMPUTER/ATMOSPHERIC RESEARCH) (MCS-8201875*); 24 MONTHS \$27,409

UNIVERSITY OF COLORADO AT BOULDER

OSTERWEIL, LEON, AND FOSDICK, LLOYD D; TOOLPACK: UNIVERSITY OF COLORADO PARTICIPATION (MCS-8000017 A02); 12 MONTHS \$94,000

GUSTAFSON, KARL E; COMPUTATIONAL STUDIES AND SOFTWARE DEVELOPMENT IN HYDRODYNAMICS, CONCENTRATION DIFFUSION EQUATIONS, AND CHEMICAL KINETICS (MCS-8012220 A01*); 12 MONTHS \$31,073

WAITE, WILLIAM M; CODE GENERATION TOOLS AND TECHNIQUES (MCS-8108063 A01); 12 MONTHS \$58,690

BYRD, RICHARD H; TRUST REGION METHODS FOR MINIMIZATION (MCS-8115475 A01); 12 MONTHS \$40,120

HARTER, PAUL K; INVESTIGATIONS INTO THE APPLICATION OF TEMPORAL LOGIC TO REAL TIME PROGRAMMING (MCS-8216707); 22 MONTHS \$21,570

CONNECTICUT

YALE UNIVERSITY

ANGLUIN, DANA C; ALGORITHMS FOR INDUCTIVE INFERENCE (MCS-8002447 A02); 24 MONTHS \$105,500

HARTIGAN, JOHN A; CLUSTERING ALGORITHMS (COMPUTER RESEARCH, STATISTICS) (MCS-8102280 A01*); 12 MONTHS \$34,599

SCHULTZ, MARTIN H, PERLIS, ALAN J, AND SCHANK, ROGER C; AN ATTACHED PROCESSOR SYSTEMS LABORATORY (MCS-8106181 A01); 12 MONTHS \$673,280

FISCHER, MICHAEL J; ADVANCED COMPUTING STRUCTURES (COMPUTER RESEARCH) (MCS-8116678 A01); 12 MONTHS \$12,892

MCDERMOTT, DREW V; SPATIAL REASONING FOR PROBLEM SOLVING AND UNDERSTANDING (COMPUTER RESEARCH) (MCS-8203980); 12 MONTHS \$88,680

LICHTENSTEIN, DAVID; GRAPH CONNECTIVITY AND APPLICATIONS (COMPUTER SCIENCE) (MCS-8204246); 24 MONTHS \$60,397

DELAWARE

UNIVERSITY OF DELAWARE

FARBER, DAVID J; CSNET PHONENET OPERATIONS AND MMDF DEVELOPMENT (MCS-8109320 A02); 12 MONTHS \$145,629

MYERS, THOMAS J; TRANSFORMATIONS ON CONDITIONAL REWRITING SYSTEMS (MCS-8112250); 24 MONTHS \$26,048

WARTER, PETER J, AND CAVINESS, B F; ACQUISITION OF COMPUTER SCIENCE AND COMPUTER ENGINEERING RESEARCH EQUIPMENT (MCS-8203947*); 12 MONTHS \$175,000

DISTRICT OF COLUMBIA

NATIONAL ACADEMY OF SCIENCES-NATIONAL RESEARCH COUNCIL

FRISHMAN, FRED; PANEL ON EVALUATION OF STATISTICAL SOFTWARE (MCS-8204241*); 9 MONTHS \$9,390

FLORIDA

UNIVERSITY OF CENTRAL FLORIDA

FREDERICK, TERRY J; ACQUISITION OF COMPUTER SCIENCE AND COMPUTER ENGINEERING RESEARCH EQUIPMENT (MCS-8203867*); 12 MONTHS \$94,161

GEORGIA

GEORGIA INSTITUTE OF TECHNOLOGY MAIN CAMPUS

DEMILLO, RICHARD A, KING, KIMBERLY N, AND MILLER, RAYMOND E; MODELS OF COMPUTATIONS AND ALGORITHMS (COMPUTER RESEARCH) (MCS-8103608 A01); 12 MONTHS \$99,825

GRIFFETH, NANCY D; *DESIGN OF DISTRIBUTED DATABASE SYSTEMS* (MCS-8200854); 24 MONTHS \$84,632

UNIVERSITY OF GEORGIA

WAGSTAFF, SAMUEL S; *COMPUTATIONS IN NUMBER THEORY* (MCS-8202356*); 12 MONTHS \$7,489

HAWAII

UNIVERSITY OF HAWAII-MANOA

PETERSON, W; *ACQUISITION OF COMPUTER SCIENCE AND COMPUTER ENGINEERING RESEARCH EQUIPMENT* (MCS-8203811*); 12 MONTHS \$19,852

ILLINOIS

DEPAUL UNIVERSITY

HOMER, STEVEN; *NON-LINEAR RECURRENCE RELATIONS, QUADRATIC AUTOMATA AND APPLICATIONS* (COMPUTER RESEARCH) (MCS-8202942); 24 MONTHS \$21,477

NORTHERN ILLINOIS UNIVERSITY

OVERBEEK, ROSS A. AND LUSK, EWING; *TOPICS IN AUTOMATED THEOREM PROVING* (COMPUTER RESEARCH) (MCS-8207496); 12 MONTHS \$54,940

NORTHWESTERN UNIVERSITY

HENSCHEN, LAWRENCE J; *AUTOMATED THEOREM PROVING* (MCS-7913252 A02); 12 MONTHS \$52,494

SUDBOROUGH, IVAN H; *APPLICATIONS OF AUTOMATA THEORY TO COMPUTATIONAL COMPLEXITY* (MCS-8109280 A01); \$13,318

LEE, D T; *CONCRETE COMPUTATIONAL COMPLEXITY* (COMPUTER RESEARCH) (MCS-8202359); 12 MONTHS \$20,362

UNIVERSITY OF ILLINOIS AT CHICAGO CIRCLE

PLESS, VERA; *COMPUTER ALGORITHMS IN FINITE GROUPS AND COMBINATORIAL STRUCTURES* (MATHEMATICAL SCIENCES) (MCS-8201311*); 12 MONTHS \$11,100

UNIVERSITY OF ILLINOIS AT URBANA

KUCK, DAVID J. AND LAWRIE, DUNCAN H; *COMPUTER SYSTEM ORGANIZATION* (MCS-8001561 A02); 12 MONTHS \$127,914

KUCK, DAVID J; *SOFTWARE STUDIES FOR PARALLEL MEMORIES, MULTIPROCESSORS, AND VIRTUAL MEMORIES* (MCS-8100512 A01); 12 MONTHS \$104,587

PREPARATA, FRANCO P; *PARALLEL COMPUTATION AND THE IMPACT OF VLSI* (MCS-8105552 A01); 12 MONTHS \$41,927

KUCK, DAVID J. AND GEAR, CHARLES W; *A COMPUTER AND SOFTWARE SYSTEMS DESIGN LABORATORY* (MCS-8105896 A01); 12 MONTHS \$807,253

SKEEL, ROBERT D; *ERROR ESTIMATION AND CONTROL FOR NUMERICAL SOLUTION OF STIFF DIFFERENTIAL EQUATIONS* (MCS-8107046*); 24 MONTHS \$24,455

LIU, CHUNG L; *COMBINATORIAL ALGORITHMS* (MCS-8107647 A01); 12 MONTHS \$41,314

KAMIN, SAMUEL N; *THE PRAGMATICS OF FINAL DATA TYPE SPECIFICATIONS* (COMPUTER RESEARCH) (MCS-8110087 A01); 12 MONTHS \$55,624

LAWRIE, DUNCAN H. AND RANDAL, J M; *MEASUREMENT AND ANALYSIS OF FILE USAGE AND FILE STORAGE HIERARCHY* (MCS-8114762*); 24 MONTHS \$95,000

SAMEH, AHMED; *PARALLEL NUMERICAL ALGORITHMS* (MCS-8117010); 12 MONTHS \$49,202

REINGOLD, EDWARD M; *ANALYSIS OF COMBINATORIAL ALGORITHMS* (MCS-8117364); 24 MONTHS \$83,442

WALTZ, DAVID L. AND HUANG, THOMAS S; *ACQUISITION OF COMPUTER SCIENCE AND COMPUTER ENGINEERING RESEARCH EQUIPMENT* (MCS-8204253*); 12 MONTHS \$141,581

MICHALSKI, R S; *STUDIES IN COMPUTER INDUCTIVE LEARNING AND PLAUSIBLE INFERENCE* (MCS-8205166); 12 MONTHS \$94,401

INDIANA

INDIANA UNIVERSITY, BLOOMINGTON

WISE, DAVID S. AND FRIEDMAN, DANIEL P; *APPLICATIVE PROGRAMMING FOR INDETERMINATE SYSTEMS* (COMPUTER RESEARCH) (MCS-8203978); 24 MONTHS \$129,171

PURDUE UNIVERSITY

RICE, JOHN R; *TEMPLATE PROCESSORS AND TOOLPACK EVALUATION* (MCS-7926310 A02); 12 MONTHS \$82,416

GAUTSCHI, WALTER; *APPLIED ORTHOGONAL POLYNOMIALS* (MCS-7927158 A01*); 24 MONTHS \$27,766

COMER, DOUGLAS E. AND DENNING, PETER J; *CSNET PROTOCOL DEVELOPMENT* (MCS-8109322 A01); 6 MONTHS \$61,133

KORB, J T, DENNING, PETER J, AND COMER, DOUGLAS E; *CSNET* (MCS-8109322 A02); 6 MONTHS \$51,144

GANNON, DENNIS; *ALGORITHMS AND ARCHITECTURES FOR HIGHLY PARALLEL SOLUTIONS TO PARTIAL DIFFERENTIAL EQUATIONS* (MCS-8109512 A01); 12 MONTHS \$53,680

YOUNG, PAUL R; *MATHEMATICAL THEORY OF COMPUTATION* (MCS-8119866); 12 MONTHS \$57,146

SIEGEL, LEAH J. AND SIEGEL, HOWARD J; *PARALLELISM IN SPEECH PROCESSING* (ECS-8120896*); 12 MONTHS \$40,000

IOWA

IOWA STATE UNIVERSITY OF SCIENCE & TECHNOLOGY

SELMAN, ALAN L; *COMPLEXITY OF FEASIBLE COMPUTATIONS* (COMPUTER RESEARCH) (MCS-8120963); 24 MONTHS \$40,000

MADYCH, WOŁODYMYR R; *SUMMABILITY METHODS FOR COMPUTED TOMOGRAPHY* (MATHEMATICAL SCIENCES) (MCS-8202147*); 24 MONTHS \$26,000

UNIVERSITY OF IOWA

ATKINSON, KENDALL E; *INTEGRAL EQUATION METHODS FOR THE SOLUTION OF LAPLACE'S EQUATION* (MATHEMATICAL SCIENCES) (MCS-8002422 A01*); 24 MONTHS \$6,000

LOUISIANA

LOUISIANA STATE UNIVERSITY, BATON ROUGE

MCGEEHEE, O CARRUTH; *RANDOM GRAPHS AND EXTREMAL GRAPH THEORY* (MCS-8104854*); 24 MONTHS \$10,000

MARYLAND

DEPARTMENT OF ARMY-NATIONAL SECURITY AGENCY

HATCH, LAWRENCE O; *A CRYPTOSYSTEM FROM PERMUTATION GROUPS* (MCS-8104206); 24 MONTHS \$30,657

JOHNS HOPKINS UNIVERSITY

O'ROURKE, JOSEPH; *ALGORITHMS FOR COMPUTER VISION* (MCS-8117424); 24 MONTHS \$63,558

KOSARAJU, S RAO; *APPLICATIONS OF FOUNDATIONS OF COMPUTING* (MCS-8205167); 12 MONTHS \$44,974

UNIVERSITY OF MARYLAND, BALTIMORE COUNTY

WERSCHULZ, ARTHUR G; *ANALYTIC COMPUTATIONAL COMPLEXITY* (COMPUTER RESEARCH) (MCS-8203271*); 24 MONTHS \$25,852

UNIVERSITY OF MARYLAND, COLLEGE PARK

MINKER, JACK; *APPLICATION OF LOGIC AND THEOREM PROVING TO DATABASES* (MCS-7919418 A01); \$12,052

ROSENFELD, AZRIEL, AND O'LEARY, DIANNE P; *REPRESENTATION AND CONTROL IN COMPUTER VISION: MULTILEVEL RELAXATION APPROACHES* (MCS-7923422 A02*); 12 MONTHS \$116,947

ROSENFELD, AZRIEL, AND O'LEARY, DIANNE P; *REPRESENTATION AND CONTROL IN COMPUTER VISION: MULTILEVEL RELAXATION APPROACHES* (COMPUTER RESEARCH) (MCS-7923422 A03); \$12,126

AGRAWALA, ASHOK K; *MODELS FOR ROUTING AND SOFTWARE IN COMPUTER SYSTEMS* (MCS-8112896); 24 MONTHS \$91,984

KANAL, LAVEN N. AND NAU, DANA S; *UNIFYING APPROACHES AND PARALLEL IMPLEMENTATIONS FOR SEARCH ALGORITHMS IN AI AND PATTERN ANALYSIS* (MCS-8117591); 24 MONTHS \$112,120

CHU, YAOHAN; *CONCURRENT LANGUAGE COMPUTER SYSTEM ARCHITECTURE* (MCS-8205707); 24 MONTHS \$88,259

ROSENFELD, AZRIEL; *WORKSHOP ON MULTIREOLUTION IMAGE PROCESSING AND ANALYSIS JULY 19-21, 1982 AT LEESBURG, VIRGINIA* (MCS-8205942); 9 MONTHS \$22,998

MASSACHUSETTS

BOLT BERANEK AND NEWMAN INC

EDMISTON, RICHARD D; *CSNET COORDINATION AND INFORMATION CENTER* (MCS-8202846); 9 MONTHS \$336,635

BOSTON UNIVERSITY

PARIKH, ROHIT J; *LOGICS OF PROGRAMS* (MCS-8109102); 12 MONTHS \$24,770

HOMER, STEVEN; *NON-LINEAR RECURRENCE RELATIONS, QUADRATIC AUTOMATA AND APPLICATIONS* (COMPUTER RESEARCH) (MCS-8218383); 22 MONTHS \$12,459

BRANDEIS UNIVERSITY

COHEN, JACQUES; *SOFTWARE TOOLS FOR THE ANALYSIS OF PROGRAMS* (MCS-7905522 A01); 24 MONTHS \$79,811

HARVARD UNIVERSITY

LEWIS, HARRY R; *LOGIC, DECISION PROBLEMS, AND COMPLEXITY* (COMPUTER RESEARCH) (MCS-8005386 A01); 24 MONTHS \$20,675

RABIN, MICHAEL O; *RANDOMIZED ALGORITHMS AND CONCURRENT COMPUTATIONS* (MCS-8121431); 12 MONTHS \$58,329

RABIN, MICHAEL O; *RANDOMIZED ALGORITHMS AND CONCURRENT COMPUTATIONS* (MCS-8121431 A01); \$17,556

LEWIS, HARRY R; *PARALLEL AND PROBABILISTIC COMPUTATION* (MCS-8200269); 24 MONTHS \$113,455

GOODMAN, NATHAN; *TREE CYCLIC SCHEMAS IN DATABASE QUERY PROCESSING* (MCS-8201429); 24 MONTHS \$66,700

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

DENNIS, JACK B; *DATA FLOW COMPUTER ARCHITECTURE* (MCS-7915255 A02); 12 MONTHS \$98,965

GALLAGER, ROBERT G; *THE DYNAMICS OF DATA NETWORK RESEARCH* (ECS-7919880 A02*); 12 MONTHS \$32,000

RICHARDS, WHITMAN A; *NATURAL COMPUTATION AND CONTROL* (COMPUTER RESEARCH) (ECS-7923110 A02*); 12 MONTHS \$165,716

MILLER, GARY L; *STUDIES INTO THE COMPUTATIONAL COMPLEXITY OF ALGEBRAIC PROBLEMS* (COMPUTER RESEARCH) (MCS-8007756 A01*); 24 MONTHS \$66,922

MEYER, ALBERT R; *LOGIC OF PROGRAMS AND COMPUTATIONAL COMPLEXITY* (COMPUTER RESEARCH) (MCS-8010707 A02); 12 MONTHS \$97,593

MEYER, ALBERT R; *LOGIC OF PROGRAMS AND COMPUTATIONAL COMPLEXITY* (COMPUTER RESEARCH) (MCS-8010707 A03); \$13,318

STEVENS, KENNETH N. AND ZUE, VICTOR W; *AUTOMATIC SPEECH UNDERSTANDING* (MCS-8112899); 12 MONTHS \$92,226

WELSCH, ROY E. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH PROJECT: NONLINEAR EXPONENTIAL-FAMILY AND BOUNDED-INFLUENCE REGRESSION (MCS-8116778*); 12 MONTHS \$30,088

SHAPIRO, JEREMY F. LAGRANGEAN TECHNIQUES FOR PARAMETRIC MIXED INTEGER PROGRAMMING (MCS-8117105*); 24 MONTHS \$49,307

SUSSMAN, GERALD J. RICH, CHARLES, AND WATERS, RICHARD C. ABSTRACTION, INSPECTION AND DEBUGGING IN PROGRAMMING (MCS-8117633*); 12 MONTHS \$123,832

GUTTAG, JOHN V. JOINT INDUSTRY/UNIVERSITY COOPERATIVE PROJECT TO BUILD 'A REWRITE RULE LABORATORY' (COMPUTER RESEARCH) (MCS-8119846*); 12 MONTHS \$56,198

PAPADIMITRIOU, CHRISTOS. ALGORITHMS, COMPLEXITY AND DATA-BASE THEORY (MCS-8120181); 24 MONTHS \$54,119

LISKOV, BARBARA H. ISSUES IN FAULT-TOLERANT DISTRIBUTED PROGRAMS (COMPUTER RESEARCH) (MCS-8203486); 12 MONTHS \$129,821

NORTHEASTERN UNIVERSITY

LECHNER, ROBERT J. HARMONIC ANALYSIS OF LOGIC FUNCTIONS I: ENCODED PROGRAMMABLE LOGIC ARRAYS (COMPUTER RESEARCH) (MCS-8108685 A01*); 12 MONTHS \$36,587

UNIVERSITY OF MASSACHUSETTS, AMHERST

LESSER, VICTOR R. COOPERATIVE DISTRIBUTED PROBLEM-SOLVING (MCS-8006327 A01); 12 MONTHS \$86,993

CLARKE, LORI A. AND RICHARDSON, DEBRA J. A PARTITION ANALYSIS METHOD TO DEMONSTRATE PROGRAM RELIABILITY (MCS-8104202 A01); 12 MONTHS \$42,924

RAMAMRITHAM, KRITHIVAS. RESOURCE CONTROLLERS FOR DISTRIBUTED SYSTEMS (MCS-8202586); 24 MONTHS \$61,383

LESSER, VICTOR R. AND RISEMAN, EDWARD M. COMPUTER SCIENCE AND COMPUTER ENGINEERING RESEARCH EQUIPMENT (MCS-8204251*); 12 MONTHS \$175,000

ZEIL, STEVEN J. TESTBED FOR EVALUATING SOFTWARE TESTING METHODS (MCS-8210084); 24 MONTHS \$39,917

WILLIAMS COLLEGE

BRUCE, KIM B. MODELS OF TYPED AND UNTYPED LAMBDA CALCULUS (MCS-8202851); 24 MONTHS \$30,821

MICHIGAN

MICHIGAN STATE UNIVERSITY

FISHER, P. DAVID. MULTIPROCESSOR ARCHITECTURES FOR ENHANCED COMPUTATIONAL CAPABILITIES OF SINGLE-CHIP VLSI MICROCOMPUTERS (MCS-7909216 A01); 24 MONTHS \$70,195

PAGE, CARL V. A STUDY OF AUGMENTED RELAXATION LABELING FOR PARALLEL IMAGE UNDERSTANDING (COMPUTER RESEARCH) (MCS-8004126 A02); 12 MONTHS \$40,000

HEDGES, HARRY G. ACQUISITION OF COMPUTER SCIENCE AND COMPUTER ENGINEERING RESEARCH EQUIPMENT (MCS-8203862*); 12 MONTHS \$113,902

MICHIGAN TECHNOLOGICAL UNIVERSITY

OTTENSTEIN, KARL J. PROGRAM TRANSLATION FOR PARALLEL SYSTEMS (COMPUTER RESEARCH) (MCS-8203487); 24 MONTHS \$35,000

UNIVERSITY OF MICHIGAN-ANN ARBOR

ATKINS, DANIEL E. HIGH-PERFORMANCE, APPLICATION-DIRECTED ARITHMETIC PROCESSORS (MCS-8007298 A02); 12 MONTHS \$87,299

SCOTT, PAUL DAVI. A NOVEL APPROACH TO CONCEPT LEARNING BASED ON THE PRINCIPLES OF OBJECT-ORIENTED LANGUAGES (COMPUTER RESEARCH) (MCS-8203958); 12 MONTHS \$39,920

HAYES, JOHN P. TESTING METHODOLOGIES FOR COMPLEX DIGITAL SYSTEMS (COMPUTER RESEARCH) (MCS-8213884); 24 MONTHS \$107,309

WAYNE STATE UNIVERSITY

CONRAD, MICHAEL. DEVELOPMENT OF EVOLUTIONARY PROGRAMMING TECHNIQUES FOR ADAPTIVE INFORMATION PROCESSES (COMPUTER RESEARCH) (MCS-8205423); 12 MONTHS \$54,362

MINNESOTA

MACALESTER COLLEGE

SCHNEIDER, G. MICHAEL. AN EXPERIMENTAL INVESTIGATION OF NOVICE/EXPERT BEHAVIOR IN PROGRAM COMPREHENSION (COMPUTER RESEARCH) (MCS-8216961); 12 MONTHS \$27,863

UNIVERSITY OF MINNESOTA

SAHNI, SARTAJ K. ALGORITHMIC STUDY OF COMBINATORIAL PROBLEMS (MCS-8005836 A03); 12 MONTHS \$56,556

ROSEN, J. B. GLOBAL OPTIMIZATION METHODS FOR LINEARLY CONSTRAINED LARGE-SCALE PROBLEMS (MCS-8101214 A01); 12 MONTHS \$48,083

THOMPSON, WILLIAM B. DISPARITY ANALYSIS OF IMAGE SEQUENCES (COMPUTER RESEARCH) (MCS-8103215 A01); 12 MONTHS \$51,884

WHITE, DENNIS E. REPRESENTATIONS OF THE SYMMETRIC GROUP AND CONSTRUCTIVE METHODS IN COMBINATORICS (MATHEMATICAL SCIENCES) (MCS-8122034*); 24 MONTHS \$13,800

SELL, GEORGE R. AND WEINBERGER, HANS F. CONFERENCE ON COMPUTER ARCHITECTURE AND COMPUTATIONAL MATHEMATICS; MINNEAPOLIS, MINNESOTA; JUNE 24, 1982 (MATHEMATICAL SCIENCES) (MCS-8207149*); 6 MONTHS \$6,000

MISSOURI

WASHINGTON UNIVERSITY

FRANKLIN, MARK A. CONTINUOUS SYSTEMS SIMULATION ON MULTIPROCESSOR SYSTEMS (COMPUTER RESEARCH) (MCS-7820731 A03*); 12 MONTHS \$116,829

NEW HAMPSHIRE

DARTMOUTH COLLEGE

CHEW, L. P. EFFICIENT STRATEGIES FOR FINDING NORMAL FORMS (COMPUTER RESEARCH) (MCS-8204821); 24 MONTHS \$31,658

NEW JERSEY

NEW JERSEY INSTITUTE OF TECHNOLOGY

HILTZ, STARR R. DETERMINANTS OF ACCEPTANCE OF COMPUTER-MEDIATED COMMUNICATION SYSTEMS (MCS-8121863); 12 MONTHS \$80,146

PRINCETON UNIVERSITY

LIEBERHERR, KARL J. COMBINATORIAL OPTIMIZATION AND SEARCH PROBLEMS (COMPUTER RESEARCH) (MCS-8004490 A01); 24 MONTHS \$19,406

ARDEN, BRUCE W. AND DOBKIN, DAVID P. VLSI DESIGN AND TESTING ENVIRONMENT (COMPUTER RESEARCH) (MCS-8121851*); 24 MONTHS \$249,150

LAPAUGH, ANDREA. COMBINATORIAL OPTIMIZATION PROBLEMS FOR OBJECT ARRANGEMENT (COMPUTER RESEARCH) (MCS-8202594); 24 MONTHS \$32,240

VALDES, JACOBO, AND LIPTON, RICHARD J. COMPLEXITY ISSUES IN VLSI (COMPUTER RESEARCH) (MCS-8203693); 24 MONTHS \$60,013

RUTGERS UNIVERSITY-BUSCH CAMPUS

YASUHARA, ANN. COMPUTABILITY ON TERM ALGEBRAS (COMPUTER RESEARCH) (MCS-8009534 A02); 12 MONTHS \$29,527

GRIGORIADIS, MICHAEL D. COORDINATED NETWORK OPTIMIZATION SYSTEM (MCS-8113503); 12 MONTHS \$51,550

MC CARTY, L. THORNE, AND SRIDHARAN, NATESA S. A COMPUTATIONAL THEORY OF LEGAL ARGUMENT (COMPUTER RESEARCH) (MCS-8203591*); 12 MONTHS \$107,690

REITER, RAYMOND. LOGICAL FOUNDATIONS FOR THE REPRESENTATION OF INCOMPLETE KNOWLEDGE IN ARTIFICIAL INTELLIGENCE AND DATABASE THEORY (MCS-8203954); 12 MONTHS \$40,017

NEW YORK

BROOKLYN COLLEGE

MATE, ATTILA. ORTHOGONAL POLYNOMIALS AND COMPUTATIONAL COMPLEXITY (MATHEMATICAL SCIENCES) (MCS-8100673 A01*); 24 MONTHS \$8,000

CITY COLLEGE

GOLDFARB, DONALD. ALGORITHMS FOR NONLINEAR PROGRAMMING (MCS-8006065 A01*); 24 MONTHS \$58,550

TURCHIN, VALENTIN. A SUPERCOMPILER SYSTEM BASED ON THE LANGUAGE REFAL (MCS-8007565 A01); 24 MONTHS \$143,243

CLARKSON COLLEGE OF TECHNOLOGY

LYNCH, JAMES F. PROBLEMS IN FINITE MODEL THEORY (MATHEMATICS AND COMPUTER SCIENCE) (MCS-8002695 A01); 24 MONTHS \$27,397

COLUMBIA UNIVERSITY

YEMINI, YECHIAM. COOPERATIVE DISTRIBUTED COMPUTING IN COMPUTER COMMUNICATION NETWORKS (MCS-8110319 A01); 12 MONTHS \$75,830

CORNELL UNIVERSITY

HARTMANIS, JURIS. COMPUTATIONAL COMPLEXITY (COMPUTER SCIENCE) (MCS-7800418 A08); 12 MONTHS \$85,983

HOPCROFT, JOHN. THEORY OF ALGORITHMS (MCS-8101220 A01); 12 MONTHS \$87,823

GREENBERG, DONALD P. INTERACTIVE COMPUTER GRAPHICS INPUT AND DISPLAY TECHNIQUES (MCS-8203979); 12 MONTHS \$200,000

CORNELL UNIVERSITY-CORNELL UNIVERSITY - ENDOWED

CONSTABLE, ROBERT L. AND DEMERS, ALAN J. ON LOGICS FOR PROGRAM DEVELOPMENT (MCS-8003349 A01*); 12 MONTHS \$224,981

VAN LOAN, CHARLES. APPLIED MATRIX COMPUTATIONS (MCS-8004106 A01); \$5,250

GRIES, DAVID J. AND SCHNEIDER, FRED B. PROGRAMMING METHODOLOGY (COMPUTER RESEARCH) (MCS-8103805 A01); 12 MONTHS \$112,404

CONSTABLE, ROBERT L. THE METAMATHEMATICS OF PROGRAMMING LOGICS (MCS-8104018 A01); 12 MONTHS \$35,254

CONSTABLE, ROBERT L. CONWAY, RICHARD W. GRIES, DAVID J. AND DEMERS, ALAN J. A LABORATORY FOR EXPERIMENTS ON THE PROGRAMMING PROCESS (MCS-8105763 A01); 12 MONTHS \$442,080

TEITELBAUM, RAY. SYNTAX-DIRECTED PROGRAMMING ENVIRONMENTS (MCS-8202877); 12 MONTHS \$120,455

GILBERT, JOHN R. COMBINATORIAL ALGORITHMS FOR NUMERICAL PROBLEMS (MCS-8202948); 24 MONTHS \$38,852

GENERAL ELECTRIC COMPANY-RESEARCH AND DEVELOPMENT CENTER

KAPUR, DEEPAK, AND MUSSER, DAVID R. JOINT INDUSTRY/UNIVERSITY COOPERATIVE PROJECT TO BUILD 'A REWRITE RULE LABORATORY' (COMPUTER RESEARCH) (MCS-8211621*); 12 MONTHS \$35,110

INSTITUTE OF ELECTRICAL & ELECTRONIC ENGRS INC

BUTLER, JON T. GROUP TRAVEL FOR US PARTICIPANTS IN THE 15TH INTERNATIONAL SYMPOSIUM ON MULTIPLE-VALUED LOGIC; PARIS, FRANCE MAY 25-27, 1982 (MCS-8121360); 12 MONTHS \$5,700

NEW YORK UNIVERSITY

SCHWARTZ, JACOB T. *THE VLSI SOFTWARE ARCHITECTURES LABORATORY ORIENTED TOWARD LARGE-SCALE PARALLELISM* (MCS-7921258 A02*); 12 MONTHS \$168,000

SCHWARTZ, JACOB T. *OPTIMIZATION OF VERY HIGH LEVEL LANGUAGES* (MCS-8004349 A02*); 12 MONTHS \$50,000

DAVIS, MARTIN, AND WEYUKER, ELAINE J. *THEORETICAL INVESTIGATIONS IN COMPUTER SCIENCE* (MCS-8201167*); 24 MONTHS \$115,000

GRISHMAN, RALPH. *INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: ROBUST NATURAL LANGUAGE PARSING USING GRADED ACCEPTABILITY* (COMPUTER RESEARCH) (MCS-8202373*); 12 MONTHS \$50,000

WIDLUND, OLOF. *FAST METHODS FOR THE SOLUTION OF LARGE FINITE DIFFERENCE AND FINITE ELEMENT SYSTEMS OF EQUATIONS* (MCS-8202236*); 12 MONTHS \$19,000

SNIR, MARC. *COMMUNICATION COMPLEXITY OF PARALLEL ALGORITHMS* (MCS-8203307); 24 MONTHS \$30,000

STATE UNIVERSITY AT ALBANY

PAN, VICTOR Y. *THE COMPUTATIONAL COMPLEXITY OF ARITHMETIC PROBLEMS* (COMPUTER SCIENCE) (MCS-8203232); 12 MONTHS \$23,442

ROSENKRANTZ, DANIEL J. *ANALYSIS OF STRUCTURES IN DATABASE SYSTEMS* (MCS-8203237); 24 MONTHS \$94,216

CHAIKEN, SETH. *MATROIDS, ELECTRICAL NETWORKS, AND ALGORITHMS* (COMPUTER SCIENCE) (MCS-8204796); 24 MONTHS \$37,566

MURRAY, NEIL V. *AN INVESTIGATION INTO THE DESIGN AND IMPLEMENTATION OF A PRAWITZ-BASED THEOREM PROVER* (COMPUTER RESEARCH) (MCS-8218331); 12 MONTHS \$12,720

STATE UNIVERSITY AT BUFFALO

EBERLEIN, PATRICIA J. *ACQUISITION OF COMPUTER SCIENCE AND COMPUTER ENGINEERING RESEARCH EQUIPMENT* (MCS-8206397); 12 MONTHS \$34,480

STATE UNIVERSITY AT STONY BROOK

HARTER, PAUL, AND BERNSTEIN, ARTHUR J. *INVESTIGATIONS INTO THE APPLICATION OF TEMPORAL LOGIC TO REAL-TIME PROGRAMMING* (MCS-8121857); 24 MONTHS \$37,430

SMITH, DAVID R, AND BERNSTEIN, ARTHUR J. *ACQUISITION OF COMPUTER SCIENCE AND COMPUTER ENGINEERING RESEARCH EQUIPMENT* (MCS-8203955); 12 MONTHS \$64,743

SYRACUSE UNIVERSITY

REYNOLDS, JOHN C. *THE DESIGN, DEFINITION, AND IMPLEMENTATION OF PROGRAMMING LANGUAGES* (MCS-8017577 A01); 12 MONTHS \$67,533

UNIVERSITY OF ROCHESTER

SEIFERAS, JOEL I. *COMPLEXITY OF ALGORITHMS FOR STORAGE AND RETRIEVAL OF CHARACTER STRINGS* (MCS-8110430); 24 MONTHS \$56,799

PETERSON, GARY L. *THE DESIGN AND COMPLEXITY OF CONCURRENT CONTROL ALGORITHMS* (COMPUTER RESEARCH) (MCS-8202950); 24 MONTHS \$20,000

ELLIS, CARLA S. *LANGUAGE CONSTRUCTS AND SUPPORT SYSTEMS FOR DISTRIBUTED COMPUTING* (MCS-8203306); 24 MONTHS \$93,677

BALLARD, DANA H. *PARAMETER NETS: TOWARDS A THEORY OF LOW-LEVEL COMPUTER VISION* (MCS-8203920); 12 MONTHS \$66,869

SMALL, STEVEN L. *PROCESS AND MESSAGE STRUCTURES FOR DISTRIBUTED NATURAL LANGUAGE COMPREHENSION* (COMPUTER RESEARCH) (MCS-8209971); 24 MONTHS \$66,009

NORTH CAROLINA

DUKE UNIVERSITY

BIERMANN, ALAN W. *VOICE INTERACTIVE COMPUTER SYSTEMS* (MCS-8113491*); 12 MONTHS \$54,041

ROSENBERG, ARNOLD. *GRAPH EMBEDDINGS AND VLSI COMPLEXITY* (COMPUTER RESEARCH) (MCS-8116522 A01); 12 MONTHS \$44,226

WAGNER, ROBERT A. *BOOLEAN VECTOR MACHINE* (COMPUTER RESEARCH) (MCS-8202610); 12 MONTHS \$119,188

NORTH CAROLINA STATE UNIVERSITY AT RALEIGH

RODMAN, ROBERT D. *VOICE INTERACTIVE COMPUTER SYSTEMS* (MCS-8114206*); 12 MONTHS \$16,743

OHIO

KENT STATE UNIVERSITY

WANG, PAUL S. *DESIGN AND IMPLEMENTATION OF COMPUTER ALGORITHMS FOR SYMBOLIC MANIPULATION* (MCS-8201239); 24 MONTHS \$47,888

ROTHSTEIN, MICHAEL. *ALGORITHMS FOR INDEFINITE INTEGRATION* (MCS-8202671); 24 MONTHS \$38,113

OHIO STATE UNIVERSITY

CROW, FRANKLIN C. *TOWARD MORE COMPLICATED COMPUTER IMAGERY* (MCS-7920977 A02); 12 MONTHS \$47,462

CSURI, CHARLES A. AND OLSON, KARL. *COMPLEX ANIMATION AND COMPLEX OBJECT SYNTHESIS* (MCS-7923670 A02); 12 MONTHS \$145,882

CHANDRASEKARAN, B. *KNOWLEDGE ORGANIZATION AND PROBLEM SOLVING FOR DIAGNOSTIC TASKS/COMPUTER SCIENCE* (MCS-8103480 A01); 12 MONTHS \$63,406

RAMANATHAN, JAYASHREE. *CUSTOMIZABLE WORKSTATION ENVIRONMENT* (COMPUTER RESEARCH) (MCS-8202873); 24 MONTHS \$64,000

OREGON

OREGON STATE UNIVERSITY

SMITH, KENNAN T. *MATHEMATICAL ASPECTS OF DIVERGENT BEAM RADIOGRAPHY* (MCS-8101586 A01*); 12 MONTHS \$20,400

TONGE, FRED M. *COMPUTER SCIENCE AND COMPUTER ENGINEERING RESEARCH EQUIPMENT* (MCS-8112087*); 12 MONTHS \$106,950

UNIVERSITY OF OREGON - EUGENE

HEDETNIEMI, STEPHEN T, AND HEDETNIEMI, SANDRA M. *TOWARDS A THEORY OF LINEAR COMPUTATION WITH RECURSIVE DATA STRUCTURES* (MCS-7903913 A01); 24 MONTHS \$50,930

PENNSYLVANIA

BURROUGHS CORPORATION

HIRSCHMAN, LYNETTE. *INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: ROBUST NATURAL LANGUAGE PARSING USING GRADED ACCEPTABILITY* (COMPUTER RESEARCH) (MCS-8202397*); 12 MONTHS \$5,000

CARNEGIE-MELLON UNIVERSITY

ANDREWS, PETER B. *AUTOMATED THEOREM PROVING IN TYPE THEORY* (MCS-8102870 A01); 12 MONTHS \$44,112

REDDY, RAJ, AKIN, OMER, AND COLE, RONALD. *KNOWLEDGE ACQUISITION AND KNOWLEDGE ENGINEERING IN SPEECH UNDERSTANDING* (COMPUTER RESEARCH) (MCS-8205539); 12 MONTHS \$141,209

CLARKE, EDMUND M. *DESIGN AND VERIFICATION OF CONCURRENT SYSTEMS* (COMPUTER RESEARCH) (MCS-8216706); 10 MONTHS \$32,700

PENNSYLVANIA STATE UNIVERSITY

BARLOW, JESSE L. *PROBABILISTIC ERROR ANALYSIS OF ALGORITHMS FROM NUMERICAL LINEAR ALGEBRA FOR FLOATING POINT COMPUTERS* (MCS-8201065); 24 MONTHS \$31,000

FREDERICKSON, GREG N. *TRADEOFF ISSUES IN DYNAMIC DATA STRUCTURES* (MCS-8201083); 24 MONTHS \$39,426

HELLER, DON E. *PARALLEL COMPUTATIONS* (COMPUTER RESEARCH) (MCS-8202372); 24 MONTHS \$65,550

IRWIN, MARY J. *COMPUTER SCIENCE AND COMPUTER ENGINEERING RESEARCH EQUIPMENT* (MCS-8203793); 12 MONTHS \$55,653

ST JOSEPH'S UNIVERSITY

BANERJI, RANAN B. *FLEXIBILITY AND EFFICIENCY OF KNOWLEDGE REPRESENTATION IN INTELLIGENT INFORMATION SYSTEMS* (MCS-8217964*); 12 MONTHS \$29,445

TEMPLE UNIVERSITY

HEIBERGER, RICHARD M. *ROBUSTNESS OF ALGORITHMS FOR REGRESSION AND ANALYSIS OF VARIANCE* (MCS-8200398); 24 MONTHS \$19,060

UNIVERSITY OF PENNSYLVANIA

JOSHI, ARAVIND K. *RESEARCH IN NATURAL LANGUAGE PROCESSING* (COMPUTER RESEARCH) (MCS-8107290 A01); 12 MONTHS \$151,907

GALLIER, JEAN H. *TRANSFORMATIONS ON CONDITIONAL REWRITING SYSTEMS* (MCS-8111726); 24 MONTHS \$34,264

BUNEMAN, PETER. *WORKSHOP ON DATABASE INTERFACE METHODS TO BE HELD OCTOBER 25 - 26, 1982 IN PHILADELPHIA, PENNSYLVANIA* (MCS-8120985); 12 MONTHS \$20,248

BAJCSY, RUZENA K. *STRATEGIES FOR THREE-DIMENSIONAL DATA ACQUISITION AND UTILIZATION* (COMPUTER RESEARCH) (MCS-8207294); 12 MONTHS \$50,000

UNIVERSITY OF PITTSBURGH

RHEINBOLDT, WERNER C. *COMPUTATIONAL CONTINUATION PROCESSES FOR THE SOLUTION OF NONLINEAR SYSTEMS OF EQUATIONS* (MCS-7805299 A04); 12 MONTHS \$52,901

KEARNS, JOHN P, AND SOFFA, MARY LOU. *THE IMPLEMENTATION OF CONCURRENCY* (COMPUTER RESEARCH) (MCS-8119441); 24 MONTHS \$84,827

KEARNS, JOHN P. *ACQUISITION OF COMPUTER SCIENCE AND COMPUTER ENGINEERING RESEARCH EQUIPMENT* (MCS-8206235*); 12 MONTHS \$24,890

RHODE ISLAND

BROWN UNIVERSITY

GRENANDER, ULF, AND FREIBERGER, WALTER. *A THEORY OF PATTERNS AND ITS APPLICATIONS/COMPUTER SCIENCE* (MCS-7924983 A02); 12 MONTHS \$98,977

VITTER, JEFFREY S. *THE ANALYSIS AND IMPLEMENTATION OF ALGORITHMS FOR INFORMATION RETRIEVAL* (MCS-8105324); 24 MONTHS \$33,834

VAN DAM, ANDRIES, SAVAGE, JOHN E, WEGNER, PETER, DOEPPNER, THOMAS W, AND SEDGEWICK, ROBERT. *AN INTEGRATED ENVIRONMENT FOR RESEARCH IN COMPUTER SCIENCE* (MCS-8121806); 12 MONTHS \$531,726

REISS, STEVEN P. *AUTOMATIC PRODUCTION OF PROGRAM DEVELOPMENT SOFTWARE* (MCS-8200670); 24 MONTHS \$76,690

UNIVERSITY OF RHODE ISLAND

KELLEY, ROBERT E. *UNIVERSITY/INDUSTRY COOPERATIVE RESEARCH CENTER IN ROBOTICS* (011-8203570*); 12 MONTHS \$5,000

TENNESSEE

VANDERBILT UNIVERSITY

FISCHER, PATRICK C. *QUERY FORMULATION FOR PROCESSING* (MCS-8115106); 24 MONTHS \$72,237

DOWDY, LAWRENCE W. *PREDICTION MODELS FOR COMPUTER SYSTEM PERFORMANCE* (MCS-8203594); 24 MONTHS \$64,540

TEXAS

RICE UNIVERSITY

DENNIS, JOHN E. *INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH PROJECT: NONLINEAR EXPONENTIAL-FAMILY AND BOUNDED-INFLUENCE REGRESSION* (MCS-8116779*); 12 MONTHS \$16,968

KENNEDY, KENNETH W., CARTWRIGHT, ROBERT S., DENNIS, JOHN E., AND JUMP, J. ROBERT. *AN EXPERIMENTAL COMPUTER NETWORK TO SUPPORT NUMERICAL COMPUTATION* (MCS-8121884); 12 MONTHS \$416,971

SOUTHERN METHODIST UNIVERSITY

MATULA, DAVID W. *FOUNDATION OF FINITE PRECISION ARITHMETIC (COMPUTER RESEARCH)* (MCS-8012704 A02*); 12 MONTHS \$34,813

UNIV OF TEXAS AT AUSTIN

YOUNG, DAVID M. AND KINCAID, DAVID R. *RESEARCH AND DEVELOPMENT OF ITERATIVE ALGORITHMS AND SOFTWARE FOR ELLIPTIC PARTIAL DIFFERENTIAL EQUATIONS* (MCS-7919829 A02*); 12 MONTHS \$49,300

BLEDSE, WOODROW W. *RESEARCH ON AUTOMATIC THEOREM PROVING AND APPLICATIONS* (MCS-8011417 A01); 12 MONTHS \$94,085

BROWN, FRANK M. *AUTOMATIC ANALYSIS OF ALGORITHMS* (MCS-8113510); 24 MONTHS \$90,106

BROWNE, JAMES C. *HIGH PERFORMANCE PARALLEL COMPUTING* (MCS-8116099); 12 MONTHS \$115,162

DALE, ALFRED G., BROWNE, JAMES C., GOOD, DONALD I., RICH, ELAINE A., AND SILBERSCHATZ, ABRAHAM. *AN EXPERIMENTAL COMPUTING FACILITY FOR THE DESIGN AND ANALYSIS OF RELIABLE HIGH-PERFORMANCE DISTRIBUTED SYSTEMS* (MCS-8122039); 12 MONTHS \$875,439

BOYER, ROBERT S. AND MOORE, J. STROTHER. *MECHANIZING THE MATHEMATICS OF COMPUTER PROGRAM ANALYSIS* (MCS-8202943); 12 MONTHS \$98,196

UNIV OF TEXAS AT DALLAS

NTAFOS, SIMON C. *REQUIRED ELEMENT TESTING (COMPUTER RESEARCH)* (MCS-8003372 A02); 24 MONTHS \$52,503

UTAH

UNIVERSITY OF UTAH

HOLLAAR, LEE A. *CONTINUED ANALYSIS AND DEVELOPMENT OF SPECIALIZED BACKEND PROCESSORS FOR VERY LARGE TEXT DATABASES* (MCS-8021116 A01); 24 MONTHS \$104,559

RIESENFELD, RICHARD F. AND HOLLAAR, LEE A. *A LABORATORY FOR COMPUTER-AIDED DESIGN* (MCS-8121750); 12 MONTHS \$644,894

RIESENFELD, RICHARD F. *SUBDIVISION ALGORITHMS FOR CURVED SURFACE REPRESENTATION AND DISPLAY (COMPUTER RESEARCH)* (MCS-8203692); 12 MONTHS \$110,000

GRISS, MARTIN L. *IMPLEMENTATION STRATEGIES FOR PORTABLE *L**I**S**P* BASED SYSTEMS (COMPUTER RESEARCH)* (MCS-8204247); 12 MONTHS \$112,524

VIRGINIA

DEPARTMENT OF DEFENSE-DEFENSE ADVANCED RESEARCH PROJECTS AGENCY

KAHN, ROBERT E. *THE CSNET PROJECT* (MCS-8116606 A01); 2 MONTHS \$70,000

COOPER, ROBERT S. *NSF/DARPA AGREEMENT FOR USE OF DARPA VLSI IMPLEMENTATION SERVICE (ECS-8210242*); 12 MONTHS \$50,000*

VIRGINIA POLYTECHNIC INSTITUTE

SHAPIRO, LINDA G. AND HARALICK, ROBERT M. *STRUCTURAL MATCHING AND GEOMETRIC REASONING FOR OBJECT CLASSIFICATION* (MCS-8102874 A01); 12 MONTHS \$63,925

KAFURA, DENNIS G. *A COMPREHENSIVE STUDY OF SOFTWARE METRICS FOR LARGE-SCALE SYSTEMS* (MCS-8207110); 24 MONTHS \$75,328

WATSON, LAYNE T. *MATHEMATICAL SOFTWARE FOR HOMOTOPY ALGORITHMS* (MCS-8207217*); 24 MONTHS \$44,814

ROACH, JOHN W. *COORDINATING ROBOT ARMS (COMPUTER RESEARCH)* (MCS-8210194); 24 MONTHS \$65,958

HARALICK, ROBERT M. *WORKSHOP ON COMPUTER VISION: REPRESENTATION AND CONTROL* FRANKLIN PIERCE COLLEGE, RINDGE, NEW HAMPSHIRE. AUGUST 2325, 1982 (MCS-8211074); 12 MONTHS \$6,800

WASHINGTON

PACIFIC LUTHERAN UNIVERSITY

SPILLMAN, RICHARD J. *DEVELOPMENT AND ANALYSIS OF A TESTABILITY MODEL FOR DIGITAL SYSTEMS (COMPUTER RESEARCH)* (MCS-8205452); 24 MONTHS \$25,178

UNIVERSITY OF WASHINGTON

LADNER, RICHARD E. *THEORY OF ADVANCED COMPUTING STRUCTURES (COMPUTER RESEARCH)* (MCS-8003337 A02); 12 MONTHS \$68,047

NOE, JERRE D., GOLDE, HELLMUT, LAZOWSKA, EDWARD D., AND ALMES, G. T. *A FUNCTIONALLY INTEGRATED ENVIRONMENT FOR DISTRIBUTED COMPUTATION* (MCS-8004111 A02); 12 MONTHS \$790,812

KLEE, VICTOR L. *CONVEXITY, COMPLEXITY AND COMBINATORICS* (MCS-8116069*); 12 MONTHS \$9,000

RITCHIE, ROBERT W. *TOWARD AUTOMATED NATURAL LANGUAGE PROCESSING: PHRASE LINKING GRAMMARS FOR SYNTAX AND SEMANTICS (INFORMATION SCIENCE) (IST-8118393*); 12 MONTHS \$30,646*

BORNING, ALAN. *INVESTIGATION OF CONSTRAINT LANGUAGES* (MCS-8202520); 24 MONTHS \$88,857

BAER, JEAN-LOUP. *COMPUTER SCIENCE AND COMPUTER ENGINEERING RESEARCH EQUIPMENT* (MCS-8204822*); 12 MONTHS \$60,000

WASHINGTON STATE UNIVERSITY

BENSON, DAVID B. *ALGEBRAIC REASONING ABOUT COMPUTER PROGRAM BEHAVIORS* (MCS-8003433 A01); 24 MONTHS \$97,079

WINKLMANN, KARL. *INFORMATION-FLOW CHARACTERISTICS OF COMBINATORIAL PROBLEMS (COMPUTER RESEARCH)* (MCS-8202964); 24 MONTHS \$28,000

DEO, NARSINGH. *COMPUTER SCIENCE AND COMPUTER ENGINEERING RESEARCH EQUIPMENT* (MCS-8203868*); 12 MONTHS \$146,512

WISCONSIN

UNIVERSITY OF WISCONSIN-MADISON

COOK, ROBERT P. *EXPERIMENTS IN DISTRIBUTED COMPUTING* (MCS-8003411 A01); 24 MONTHS \$66,280

LANDWEBER, LAWRENCE H., COOK, ROBERT P., DEWITT, DAVID J., AND FINKEL, RAPHAEL A. *A SOFTWARE-PARTITIONABLE MULTICOMPUTER: A TESTBED FOR DISTRIBUTED PROCESSING* (MCS-8105904 A02); 12 MONTHS \$1,046,967

LANDWEBER, LAWRENCE H., COOK, ROBERT P., DEWITT, DAVID J., AND FINKEL, RAPHAEL A. *A SOFTWARE-PARTITIONABLE MULTICOMPUTER: A TESTBED FOR DISTRIBUTED PROCESSING* (MCS-8105904 A02); \$18,000

LANDWEBER, LAWRENCE H. *SERVICE HOST FUNCTIONS AND TECHNICAL SUPPORT OF CSNET* (MCS-8109318 A02); 12 MONTHS \$445,866

MANGASARIAN, OLVI L., MEYER, R. R., AND ROBINSON, S. M. *COMPUTATION AND THEORY IN NONLINEAR PROGRAMMING* (MCS-8200632); 12 MONTHS \$111,428

KATZ, RANDY H. *A DATA MANAGEMENT SYSTEM FOR VLSI DESIGN DATA* (MCS-8201860); 24 MONTHS \$67,798

DEWITT, DAVID J. *EVALUATION OF DATABASE MACHINE ARCHITECTURES* (MCS-8201870); 24 MONTHS \$76,486

BARWISE, K. JON. *COMPUTATIONAL ASPECTS OF SITUATION SEMANTICS (COMPUTER RESEARCH)* (MCS-8201940*); 24 MONTHS \$35,073

FISCHER, CHARLES N. *ADVANCES IN THE THEORY AND DESIGN OF DIAGNOSTIC COMPILERS AND LANGUAGE-BASED PROGRAM DEVELOPMENT SYSTEMS* (MCS-8202444); 24 MONTHS \$107,236

GOODMAN, JAMES R. *VLSI IMPLICATIONS ON COMPUTER DESIGN (COMPUTER RESEARCH)* (MCS-8202952); 24 MONTHS \$69,655

BENT, SAMUEL W. *DYNAMIC WEIGHTED DATA STRUCTURES (COMPUTER RESEARCH)* (MCS-8203238); 24 MONTHS \$31,998

KIME, CHARLES R. *TESTING AND DIAGNOSIS IN VLSI CIRCUITS AND SYSTEMS (COMPUTER RESEARCH)* (MCS-8206564); 12 MONTHS \$52,740

UNIVERSITY OF WISCONSIN-MILWAUKEE

DAVIDA, GEORGE I. *DATA SECURITY* (MCS-8112345 A01); 12 MONTHS \$45,629

REGIONAL INSTRUMENTATION FACILITIES (MPS)

ARIZONA

ARIZONA STATE UNIVERSITY

COWLEY, JOHN M., BUSECK, PETER R., EYRING, LEROY, AND SPENCE, JOHN C. *REGIONAL INSTRUMENTATION FACILITY FOR HIGH RESOLUTION ELECTRON MICROSCOPY (CHE-7916098 A03*); 12 MONTHS \$38,622*

UNIVERSITY OF ARIZONA

DAMON, PAUL E. AND DONAHUE, DOUGLAS J. *REGIONAL INSTRUMENTATION FACILITY FOR RADIOCARBON DATING AND TRACE ELEMENT ANALYSIS (CHE-7818576 A04*); 18 MONTHS \$209,000*

CALIFORNIA

CALIFORNIA INSTITUTE OF TECHNOLOGY

CHAN, SUNNEY I. *SOUTHERN CALIFORNIA REGIONAL CENTER FOR NUCLEAR MAGNETIC RESONANCE SPECTROSCOPY (CHE-7916324 A02); 9 MONTHS \$245,378*

UNIVERSITY OF CALIFORNIA, BERKELEY

LEE, YUAN T. AND MOORE, C. BRADLEY. *SAN FRANCISCO LASER CENTER (CHEMISTRY) (CHE-7916250 A03*); 8 MONTHS \$37,000*

ILLINOIS

UNIVERSITY OF ILLINOIS AT URBANA

GUTOWSKY, H. S. AND OLDFIELD, ERIC. *REGIONAL INSTRUMENTATION FACILITY FOR NUCLEAR MAGNETIC RESONANCE SPECTROSCOPY (CHE-7916100 A03); 6 MONTHS \$100,000*

MASSACHUSETTS

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

FELD, MICHAEL S. *NORTHEAST REGIONAL CENTER FOR LASER SPECTROSCOPY AND DYNAMICS (CHE-7818580 A02); 12 MONTHS \$370,000*

FELD, MICHAEL S. *REGIONAL INSTRUMENTATION FACILITY FOR LASER SPECTROSCOPY AND DYNAMICS (CHEMISTRY) (CHE-7818580 A03*); 12 MONTHS \$287,999*

OTHER

MARYLAND

CONSOLIDATED VISUAL CENTER

NORRIS, THOMAS R; GRAPHIC ARTS SERVICES (PRM-8122157 A02);
\$15,000

ENGINEERING

ELECTRICAL, COMPUTER & SYSTEMS ENGINEERING

ALABAMA

AUBURN UNIVERSITY MAIN CAMPUS

JAEGER, RICHARD C. AND DIEHL, SHERRA E.; LOW PRESSURE CHEMICAL VAPOR DEPOSITION EQUIPMENT (ECS-8112294); 12 MONTHS \$30,300
MYKYTKA, EDWARD F.; NEW ENGINEERING FACULTY RESEARCH INCENTIVE: A METHODOLOGY FOR MODEL SELECTION AND EVALUATION IN INVENTORY CONTROL (ECS-8206406); 12 MONTHS \$10,000

UNIVERSITY OF ALABAMA IN BIRMINGHAM

FLETCHER, SAMUEL G.; PRODUCTION AND VISUAL ARTICULATORY SHAPING OF SPEECH IN DEAF CHILDREN (ECS-8016736 A01); 12 MONTHS \$117,585

UNIVERSITY OF ALABAMA IN HUNTSVILLE

SUNG, C. C.; OPTICAL BISTABILITY IN SEMICONDUCTORS AND THE CO-OPERATIVE EFFECTS (ECS-8203716); 12 MONTHS \$33,902

ARIZONA

UNIVERSITY OF ARIZONA

NUDELMAN, SOL; PHOTOELECTRONIC (VIDEO) RADIOLOGY (ECS-7918518 A02); 12 MONTHS \$70,000
GIBBS, HYATT M.; IUC: OPTICAL BISTABILITY EXPERIMENTS TO IMPROVE SOLID-STATE DEVICES AND BASIC UNDERSTANDING (ECS-8020303 A01*); 12 MONTHS \$45,381
HAMILTON, DOUGLAS J. AND KERWIN, WILLIAM J.; THERMIONIC INTEGRATED CIRCUIT (TIC) RESEARCH (ECS-8022928 A01); 12 MONTHS \$75,084
MACLEOD, H. ANGUS, STEGEMAN, GEORGE I. AND SARID, DROR; SPECIALIZED RESEARCH EQUIPMENT: RF SPUTTERING SYSTEM (ECS-8112540*); 12 MONTHS \$50,000
HUNT, BOBBY R. AND WANG, Z. D.; NEW CONCEPTS IN THE SLANT TRANSFORM AND THE GENERATION OF NEW ORTHOGONAL TRANSFORMS (ECS-8116132); 12 MONTHS \$37,170
SARID, DROR; POWER DEPENDENT REFRACTIVE INDEX PHENOMENA IN OPTICAL WAVEGUIDES AND INTEGRATED OPTICAL CIRCUITS (ECS-8117311); 24 MONTHS \$81,430
STEGEMAN, GEORGE I.; MULTI-WAVE MIXING IN PLANAR OPTICAL WAVEGUIDES (ECS-8117433); 12 MONTHS \$92,000
SARID, DROR; THE PROPERTIES OF THE ANTISYMMETRIC SURFACE PLASMA WAVE PROPAGATING ON VERY THIN METAL FILMS (ECS-8120348); 12 MONTHS \$96,731
KOLIOPOULOS, CHRIS L.; RESEARCH INITIATION: RAPID CONTOURING OF MACHINED PARTS TO HIGH RESOLUTION BY OPTICAL PHASE DETECTION USING SOLID-STATE DETECTOR ARRAYS (ECS-8304871); 24 MONTHS \$48,000

ARKANSAS

UNIVERSITY OF ARKANSAS FAYETTEVILLE

GATTIS, JIMMY L., KAUPP, VERNE H., WAITE, WILLIAM P., JONES, RICHARD A. AND MIX, DWIGHT F.; SPECIALIZED EQUIPMENT: DEVELOPMENT OF AN IMAGE PROCESSING FACILITY (ECS-8203199); 12 MONTHS \$27,500

CALIFORNIA

CALIFORNIA INSTITUTE OF TECHNOLOGY

YARIV, AMNON; SEMICONDUCTOR-BASED OPTOELECTRONIC DEVICES FOR OPTICAL COMMUNICATION (ECS-7909972 A03); 12 MONTHS \$95,000
BELLAN, PAUL M.; CONTINUATION OF LOWER HYBRID WAVE RESEARCH ON THE ENCORE TOKAMAK (ECS-8113533); 12 MONTHS \$79,919
DYNAMICS TECHNOLOGY INC
SATORIUS, EDGAR H.; INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH: THE EFFECTS OF QUANTIZATION ERRORS ON THE PERFORMANCE OF ADAPTIVE DIGITAL FILTERS (ECS-8206513*); 12 MONTHS \$26,974
INDIVIDUAL AWARD
STEFFES, PAUL G.; NEFRI: REMOTE SENSING OF CLOUDS BEARING ACID RAIN (ECS-8205472); 12 MONTHS \$10,000
SAN DIEGO STATE UNIVERSITY
IOSUPOVICZ, ALEXANDER; VLSI MACHINES FOR PHYSICAL DESIGN AUTOMATION OF DIGITAL SYSTEMS (ECS-8116136); 24 MONTHS \$68,749

MASSEY, GAIL A.; NONLINEAR INTERACTION OF LIGHT AT OPTICAL SURFACES (ECS-8119737); 12 MONTHS \$60,737

SRI INTERNATIONAL

CRAIGHILL, EARL, AND BELL, DONALD W.; USE OF VOICE-TO-TEXT CONVERSION IN DEAF-HEARING DIALOGUES (ECS-8023527 A01); 12 MONTHS \$162,504
NITZAN, DAVID, AND SMITH, RANDALL C.; MODELING AND PLANNING OF DISTRIBUTED ROBOT SENSING (ECS-8200615); 12 MONTHS \$84,939

STANFORD UNIVERSITY

MANNE, ALAN S. AND EAVES, B. CURTIS; COMPUTATION OF EQUILIBRIA FOR PIECEWISE LINEAR SYSTEMS (SES-7816911 A03*); 12 MONTHS \$20,000

COVER, THOMAS M.; MULTIPLE USER CHANNELS AND INFORMATION THEORY (ECS-7823334 A03); \$9,834

BYER, ROBERT L.; MOLECULAR BEAM CARS SPECTROSCOPY (ECS-7912673 A02); 12 MONTHS \$63,275

HELLMAN, MARTIN E.; DATA SECURITY (ECS-7916161 A03*); 12 MONTHS \$44,083

GOODMAN, JOSEPH W. AND MACOVSKI, ALBERT; INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH PROJECT: THREE DIMENSIONAL VISUALIZATION OF COMPUTERIZED TOMOGRAPHY IMAGES (ECS-7926432 A02*); 12 MONTHS \$61,737

QUATE, CALVIN F.; RESEARCH ON ACOUSTIC MICROSCOPY WITH SUPERIOR RESOLUTION (ECS-8010786 A01); 12 MONTHS \$120,000

DANTZIG, GEORGE B. AND MURRAY, WALTER; OPTIMIZATION OF LARGE-SCALE DYNAMIC SYSTEMS WITH SPECIAL REFERENCE TO ENERGY AND WATER RESOURCES (ECS-8013974 A01*); 12 MONTHS \$85,000

WHITE, ROBERT L. AND TILLER, WILLIAM A.; THE PHYSICS OF PLASMA BUBBLES (ECS-8014561 A01); 12 MONTHS \$45,004

FEIGENBAUM, EDWARD A., BUCHANAN, BRUCE G., KEDES, LAWRENCE H. AND BRUTLAG, DOUGLAS L.; MOLGEN: A COMPUTER SCIENCE APPLICATION TO MOLECULAR BIOLOGY (ECS-8016247 A02*); 12 MONTHS \$88,547
GRAY, ROBERT M.; INFORMATION THEORY AND DATA COMPRESSION (ECS-8016714 A01); 12 MONTHS \$43,723

HILLIER, FREDERICK S. AND HARRISON, J. MICHAEL; OPTIMAL DESIGN AND CONTROL OF QUEUEING SYSTEMS (ECS-8017867 A01); 12 MONTHS \$65,000

VEINOTT, ARTHUR F.; DYNAMIC CONCAVE-COST, AND LATTICE PROGRAMMING WITH APPLICATIONS TO INVENTORY CONTROL AND SCHEDULING (ECS-8022027 A01); 12 MONTHS \$85,000

CUTLER, C. CHAPIN; NONLINEARITY AND INTERMODULATION IN MICROWAVE ACOUSTICS (ECS-8111100); 12 MONTHS \$60,590

KAILATH, THOMAS, AND MORF, MARTIN; STUDY AND DEVELOPMENT FOR NEW SQUARE-ROOT LEAST-SQUARES ALGORITHMS FOR ESTIMATION IN LARGE-SCALE SYSTEMS (ECS-8200065); 12 MONTHS \$80,823

PEASE, R. F.; MICROFABRICATION USING ELECTRON BEAMS (ECS-8203296); 12 MONTHS \$70,166

TAKSAR, MICHAEL I.; RESEARCH INITIATION: OPTIMAL CONTROL OF DIFFUSIONS WITH UNBOUNDED CONTROL RATES (ECS-8304540); 24 MONTHS \$43,224

UNIVERSITY OF CALIFORNIA, BERKELEY

GUSTAFSON, TURE K.; TUNNELING INVESTIGATIONS OF OPTICAL ELECTRONICS (ECS-7923877 A02); 12 MONTHS \$60,000

WONG, EUGENE; INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: HETEROGENEOUS DATA MODELS AND DISTRIBUTED DATABASE ARCHITECTURE (ECS-8007883 A03*); 12 MONTHS \$51,096

CHUA, L. O.; RESEARCH ON PROBLEMS IN NONLINEAR NETWORKS AND SYSTEMS (ECS-8020640 A01); 12 MONTHS \$59,500

HESS, DENNIS W.; PLASMA ETCHING OF ALUMINUM FOR INTEGRATED CIRCUITS APPLICATIONS (ECS-8021508 A01); 12 MONTHS \$49,650

GRAY, PAUL R., HODGES, D. A. AND PEDERSON, D. O.; TECHNIQUES FOR ANALOG DIGITAL DATA ACQUISITION SYSTEMS UTILIZING A SINGLE METAL-OXIDE-SEMICONDUCTOR (MOS) INTEGRATED CIRCUIT (ECS-8022872 A01); 12 MONTHS \$80,000

WANG, SHYH; QUATERNARY LASERS FOR GUIDED-WAVE OPTICAL COMMUNICATIONS (ECS-8024307 A01); 12 MONTHS \$58,000

LICHTENBERG, ALLAN J. AND LIEBERMAN, MICHAEL A.; RESEARCH IN HIGH ENERGY PLASMAS (ECS-8104561 A01); 12 MONTHS \$97,000

NEUREUTHER, A. R. AND OLDHAM, WILLIAM G.; INVESTIGATION AND MODELING OF PROCESSES FOR VLSI (ECS-8106243 A01); 12 MONTHS \$141,100

VAN DUZER, T.; RESEARCH IN JOSEPHSON DEVICES FOR DIGITAL CIRCUITS (ECS-8110032 A01); 12 MONTHS \$87,350

THOMPSON, CLARK D. THEORETICAL STUDIES ON VLSI CIRCUITS: AREA, TIME AND TESTABILITY (ECS-8110684 A01); 12 MONTHS \$32,000
WHINNERY, JOHN R. SHORT-PULSE OPTICAL AND OPTO-ELECTRONIC DEVICES (ECS-8114526); 12 MONTHS \$99,300
BARLOW, RICHARD E. NETWORK RELIABILITY (ECS-8115000); 12 MONTHS \$49,082

SCHWARZ, S E. MONOLITHIC TECHNOLOGY FOR NEAR-MILLIMETER COMMUNICATIONS (ECS-8116018); 12 MONTHS \$46,000
VARAIYA, PRAVIN P. CONTROL OF DYNAMICAL SYSTEMS WITH MULTIPLE EQUILIBRIA (ECS-8118213); 12 MONTHS \$60,000
DESOER, CHARLES A. BASIC RESEARCH IN SYSTEM THEORY (ECS-8119763); 12 MONTHS \$60,000

GRAY, PAUL R. AND MEYER, ROBERT G. RESEARCH IN HIGH-FREQUENCY ANALOG SOLID STATE ELECTRONIC CIRCUITS FOR COMMUNICATION SYSTEMS (ECS-8120012); 12 MONTHS \$80,000

WHINNERY, JOHN R. AND WANG, SHYH. WORKSHOP AND SPECIAL GRANTEE-USER'S MEETING ON OPTICAL COMMUNICATIONS SYSTEMS - THE NEXT DECADE (ECS-8120046); 12 MONTHS \$18,558

HODGES, DAVID A. AND OLDHAM, WILLIAM G. SPECIALIZED RESEARCH EQUIPMENT: THIN FILM DEPOSITION AND DRY ETCHING SYSTEMS FOR MICROFABRICATION RESEARCH (ECS-8120447*); 24 MONTHS \$100,000

MULLER, R S. AND WHITE, R M. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: CONCEPTS AND TECHNOLOGIES FOR INTEGRATED SENSORS (ECS-8120562*); 12 MONTHS \$49,000

POLAK, ELIJAH, AND SANGIOVANNI-VIN, ALBERTO. OPTIMIZATION-BASED METHODOLOGY FOR COMPUTER-AIDED DESIGN (ECS-8121149); 13 MONTHS \$95,000

KUH, E S. LAYOUT OF VERY LARGE SCALE INTEGRATED (VLSI) CIRCUITS AND ASSOCIATED ALGORITHMS FOR COMPUTER-AIDED DESIGNS (ECS-8301580); 12 MONTHS \$80,000

BARSKY, BRIAN A. RESEARCH INITIATION: ALGORITHMS TO INTEGRATE ANTIALIASING AND HIDDEN SURFACE CALCULATIONS IN COMPUTER GRAPHICS (ECS-8204381); 24 MONTHS \$48,000

HOCHBAUM, DORIS S. RESEARCH INITIATION: ANALYSIS AND DESIGN OF HEURISTICS FOR HARD PROBLEMS (ECS-8204695); 24 MONTHS \$46,712

WALRAND, JEAN C. ANALYSIS OF FLOW DELAYS IN NETWORKS OF QUEUES (ECS-8205428); 24 MONTHS \$44,000

UNIVERSITY OF CALIFORNIA, DAVIS

CHURCHILL, JOHN N. LONG TERM CONDUCTANCE TRANSIENTS ON GAAS FETs (ECS-7908955 A02); 12 MONTHS \$24,103

DIENES, ANDREW J. SYNCHRONOUSLY PUMPED DOUBLE MODE-LOCKING AND MEASUREMENTS OF PICOSECOND PULSE SHAPES (ECS-7921177 A02); 12 MONTHS \$28,461

KRENER, ARTHUR J. NONLINEAR SYSTEMS UNDER FEEDBACK (MCS-8003263 A02*); 12 MONTHS \$8,185

UNIVERSITY OF CALIFORNIA, IRVINE

BARNES, CASPER W. DIGITAL FILTER STRUCTURES (ECS-8109239); 12 MONTHS \$49,045

UNIVERSITY OF CALIFORNIA, LOS ANGELES

CHEN, FRANCIS F. AND JOSHI, CHAN J. NONLINEAR INTERACTION OF CO₂ LASER RADIATION WITH PLASMAS (ECS-8003558 A02); 12 MONTHS \$57,900

WANG, KANG L. INVESTIGATION ON INTERFACE REACTIONS OF TRANSITION-METAL/SI STRUCTURES INDUCED BY ION IMPLANTATION (ECS-8011037 A01); 12 MONTHS \$42,989

OMURA, JIM K. AND RUBIN, IZHAK. RESEARCH IN SOURCE-CHANNEL CODING AND COMMUNICATION NETWORKS (ECS-8012568 A01); 12 MONTHS \$67,000

DISTEFANO, JOSEPH J. AUTOMATED OPTIMAL EXPERIMENT DESIGN (ECS-8015965 A01); 12 MONTHS \$72,051

YEH, CAVOUR W. AND GERLA, MARIO. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH PROJECT: THE EXPLOITATION OF GUIDED WAVE OPTICS IN LOCAL COMPUTER NETWORKS (ECS-8020300 A02*); 12 MONTHS \$82,718

TEMES, GABOR C. AND MARTIN, KENNETH W. NOVEL CIRCUITS AND APPLICATIONS FOR SWITCHED-CAPACITOR FILTERS (ECS-8105166 A01); 12 MONTHS \$75,000

WANG, PAUL C. FEEDBACK CONTROL OF NONLINEAR DISTRIBUTED SYSTEMS WITH APPLICATIONS TO THERMONUCLEAR PLASMA CONTROL (ECS-8115631*); 24 MONTHS \$68,000

LIN, ANTHONY T. AND DAWSON, JOHN M. COMPUTER SIMULATIONS OF FREE ELECTRON LASERS OPERATED IN COLLECTIVE MODE (ECS-8115653); 12 MONTHS \$70,000

CHEN, FRANCIS F. AND JOSHI, C J. DIAGNOSTIC RUBY-LASER AMPLIFIER (ECS-8120833); 12 MONTHS \$26,073

WILLSON, A N. THEORETICAL STUDIES OF CONTINUOUS AND DISCRETE-TIME ELECTRIC CIRCUITS (ECS-8206207); 12 MONTHS \$46,000

UNIVERSITY OF CALIFORNIA, SAN DIEGO

CHANG, WILLIAM S. HYBRID CAVITY WAVEGUIDE LASERS (ECS-7922933 A02); 24 MONTHS \$110,000

HELTON, J WILLIAM. OPERATOR THEORY MOTIVATED BY THEORETICAL ENGINEERING AND BY PARTIAL DIFFERENTIAL EQUATIONS (MCS-8001698 A02*); 12 MONTHS \$3,000

SWORDE, DAVID D. CONTROL OF STOCHASTIC SYSTEMS WITH NON-MARKOVIAN MODAL CHANGES (ECS-8003547 A02); 12 MONTHS \$36,588

LEE, SING H. OPTICAL ANALOG, HYBRID AND DIGITAL COMPUTATIONS (ECS-8017460 A01); 12 MONTHS \$80,000

HELSTROM, CARL W. GROUP TRAVEL FOR U.S. PARTICIPANTS IN THE IEEE INTERNATIONAL SYMPOSIUM ON INFORMATION THEORY, LES ARCS, FRANCE, JUNE 21-25, 1982 (ECS-8120722*); 6 MONTHS \$10,200

UNIVERSITY OF CALIFORNIA, SANTA BARBARA

MITRA, SANJIT K. DESIGN OF OPTIMUM RECURSIVE DIGITAL FILTERS (ECS-7918028 A01); 6 MONTHS \$10,000

MATTHAEI, GEORGE L. ELECTRIC WAVEGUIDE FILTER AND MATCHING-STRUCTURE TECHNIQUES FOR MILLIMETER-WAVE AND OPTICAL APPLICATIONS (ECS-8016720 A01); 12 MONTHS \$37,239

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SILJAK, DRAGOSLAV D. DECENTRALIZED CONTROL OF LARGE-SCALE SYSTEMS (ECS-8011210 A01); 12 MONTHS \$56,110

UNIVERSITY OF SOUTHERN CALIFORNIA

SILVERMAN, LEONARD M. 2-D IMAGE RESTORATION: ADAPTIVE AND RECURSIVE APPROACHES (ECS-8011911 A01); 12 MONTHS \$42,500

WEINGARTEN, VICTOR I. ANALYSIS AND DESIGN OF IMPLANTS FOR A FRACTURED FEMUR (ECS-8018270 A01); 12 MONTHS \$80,842

GUNDERSEN, MARTIN A. INDUSTRY/COOPERATIVE: A STUDY OF IMPURITY RELATED DEFECTS IN DEVICE-TYPE SEMICONDUCTORS (ECS-8020322 A01); 12 MONTHS \$79,816

SAFONOV, MICHAEL G. AND SILVERMAN, LEONARD M. ROBUST CONTROL METHODS FOR LARGE SPACE STRUCTURES (ECS-8112327*); 12 MONTHS \$51,062

BASS, MICHAEL. INTENSITY DEPENDENT ABSORPTION RESEARCH (ECS-8113458); 12 MONTHS \$76,318

HELLWARTH, ROBERT W. NONLINEAR OPTICAL MICROSCOPY (ECS-8114828); 12 MONTHS \$68,195

GARMIRE, ELSA, AND GOLDSTONE, JEFF. THE SEARCH FOR OPTICAL BISTABILITY IN NEW MATERIALS (ECS-8114829); 12 MONTHS \$95,542

BEKEY, GEORGE A. AND MENDEL, JERRY M. PROBLEMS IN PARAMETER ESTIMATION AND IDENTIFICATION (ECS-8200882); 12 MONTHS \$70,000

CHELLAPPA, RAMALINGA. RESEARCH INITIATION: MAXIMUM LIKELIHOOD ESTIMATION IN STATIONARY RANDOM FIELD MODELS (ECS-8204181); 24 MONTHS \$48,000

LI, VICTOR O. RESEARCH INITIATION: PERFORMANCE MODELS OF DISTRIBUTED DATABASES (ECS-8204495); 24 MONTHS \$48,000

COLORADO

COLORADO STATE UNIVERSITY

COLLINS, GEORGE J. HIGH EFFICIENCY CW ION LASERS BY ELECTRON BEAM PUMPING (ECS-8021505 A01); 12 MONTHS \$71,990

ELLIOTT, HOWARD. HYBRID ADAPTIVE CONTROL OF MULTIVARIABLE SYSTEMS (ECS-8110042); 24 MONTHS \$26,000

LOEFFLER, CHARLES M. RESEARCH INITIATION: DESIGN OF NEW NARROWBAND DIGITAL FILTER STRUCTURES (ECS-8204614); 12 MONTHS \$24,000

UNIVERSITY OF COLORADO AT BOULDER

KUESTER, EDWARD F. AND CHANG, DAVID C. INVESTIGATION OF ELECTROMAGNETIC TRANSIENT PHENOMENA INVOLVING A DISPERSIVE, LAYERED HALF-SPACE (ECS-8021041 A01); 12 MONTHS \$36,485

HOROWITZ, ISAAC M. QUANTITATIVE SYNTHESIS OF UNCERTAIN MULTIPLE INPUT-OUTPUT FEEDBACK SYSTEMS (ECS-8101958 A01); 12 MONTHS \$41,000

LOVE, WILLIAM F. AND MILLER, STANLEY C. DC AND AC FLICKER NOISE (ECS-8104575 A01); 12 MONTHS \$78,758

GRIFFITHS, LLOYD J. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH: THE EFFECTS OF QUANTIZATION ERRORS ON THE PERFORMANCE OF ADAPTIVE DIGITAL FILTERS (ECS-8105203*); 12 MONTHS \$23,261

HACHTEL, GARY D. AND LIGHTNER, MICHAEL R. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH PROJECTS: RESEARCH ON TOPOLOGICAL DESIGN TOOLS FOR STRUCTURED LOGIC ARRAYS (ECS-8121446*); 12 MONTHS \$80,000

KING, ROGER. NEW ENGINEERING FACULTY RESEARCH INCENTIVE: A SEMANTIC APPROACH TO THE DATABASE LIFE-CYCLE (ECS-8206234); 12 MONTHS \$10,000

CONNECTICUT

TRINITY COLLEGE

BRONZINO, JOSEPH D. NEURONAL MECHANISMS CONTROLLING CORTICAL EEG SYNCHRONIZATION AND SLOW-WAVE SLEEP (ECS-8118440); 12 MONTHS \$41,402

UNIVERSITY OF CONNECTICUT

LUH, PETER B. RESEARCH INITIATION: RESEARCH ON STACKELBERG GAMES AND ELECTRICITY PRICING (ECS-8105984 A01); 12 MONTHS \$26,327

PAPANTONI KAZA, PANAYOTA. MONITORING THE PERFORMANCE OF COMMUNICATION NETWORKS (ECS-8119885); 12 MONTHS \$25,000

YALE UNIVERSITY

MA, TSO-PING. OPTOELECTRONIC PROPERTIES OF MIS TUNNEL JUNCTIONS (ECS-7906333 A02); 12 MONTHS \$43,975

MORSE, A S. COLLABORATIVE RESEARCH IN AN INVESTIGATION OF THE RELATIONSHIP BETWEEN THE POLYNOMIAL MATRIX AND GEOMETRIC THEORIES OF LINEAR SYSTEMS (ECS-7916871 A01); 24 MONTHS \$67,000

KUC, ROMAN. SIGNAL PROCESSING RESEARCH AND IMPLEMENTATION APPLIED TO DIAGNOSTIC ULTRASOUND SIGNALS (ECS-7919601 A02); 12 MONTHS \$51,737

PROBER, DANIEL E. RESEARCH ON SUBMICRON SUPERCONDUCTING QUANTUM DEVICES (ECS-7927165 A02); 12 MONTHS \$70,000

DEMBO, RON S; LARGE-SCALE NONLINEAR PROGRAMMING WITH APPLICATION TO NETWORK FLOW PROBLEMS (ECS-8119513); 12 MONTHS \$33,538

TUTEUR, FRANZ B; ADAPTIVE ESTIMATORS AND DIGITAL FILTERS FOR TIME-VARYING SIGNALS AND SYSTEMS (ECS-8200282*); 12 MONTHS \$31,959

OWEN, JAMES F; RESEARCH INITIATION: RESONANCES IN LIGHT SCATTERING FROM FIBERS: USE IN SIZE DETERMINATION, EFFECT ON RAMAN EMISSION, AND EFFECT ON SCATTERING UNDER CONDITIONS OF OPT. GAIN (ECS-8204890); 24 MONTHS \$48,000

DELAWARE

UNIVERSITY OF DELAWARE

ALLEBACH, JAN P; DIGITAL IMAGE PROCESSING: TIME-VARYING AND NONLINEAR PROBLEMS (ECS-8120759); 12 MONTHS \$34,933

NEUTS, MARCEL F; ALGORITHMIC METHODS FOR PROBLEMS IN QUEUEING THEORY AND APPLIED PROBABILITY (ECS-8205404*); 12 MONTHS \$27,924

DISTRICT OF COLUMBIA

CREATIVE PRESENTATIONS INC

MACWEEN, IRMELA A; GRAPHIC ARTS SERVICES (PRM-8122158 A01); \$10,000

MACWEEN, IRMELA A; GRAPHIC ARTS SERVICES (PRM-8122158 A02); \$4,000

GEORGE WASHINGTON UNIVERSITY

GROSS, DONALD, MILLER, DOUGLAS R, AND SOLAND, RICHARD M; INVESTIGATION OF CLOSED NETWORK QUEUEING THEORY AND DISCRETE OPTIMIZATION TECHNIQUES FOR MULTI-ECHELON REPAIRABLE ITEM INVENTORY CONTROL (ECS-8200837); 12 MONTHS \$69,578

FIACCO, ANTHONY V; DEVELOPMENT OF PARAMETRIC NONLINEAR PROGRAMMING OPTIMAL VALUE AND SOLUTION BOUNDS (OPERATION RESEARCH) (ECS-8201370); 12 MONTHS \$30,000

HOWARD UNIVERSITY

COLEMAN, DON M; DEVELOPMENT OF METHODS FOR THE SYSTEMATIC DESIGN OF DISTRIBUTED COMPUTER SYSTEMS (ECS-8207797); 12 MONTHS \$35,000

NATIONAL ACADEMY OF SCIENCES-NATIONAL RESEARCH COUNCIL

STEVEY, H G, AND HADDAD, TERRIER A; PERFORM A STUDY OF EDUCATION AND UTILIZATION OF THE ENGINEER 1980-2000: STATUS, NEEDS, AND OPPORTUNITIES, PHASE TWO (ENG-8212257*); 12 MONTHS \$151,563

FLORIDA

UNIVERSITY OF FLORIDA-ENGINEERING & INDUSTRIAL EXPERIMENT STATION

SUTHERLAND, ALAN D, AND VAN DER ZIEL, A; QUANTUM NOISE AT 90 GHZ AND 2K (ECS-8007623 A01); 12 MONTHS \$82,265

WATSON, J K; MAGNETIC REVERSAL PROCESSES, WITH APPLICATION TO CORE MATERIALS (ECS-8111623); 24 MONTHS \$92,159

NEUGROSCH, ARNOST; EXPERIMENTAL INVESTIGATION OF HEAVY-DOPING EFFECTS IN SEMICONDUCTORS, WITH APPLICATIONS TO DEVICE PERFORMANCE (ECS-8203091); 12 MONTHS \$55,000

UNIVERSITY OF FLORIDA

TRIGGIANI, ROBERTO, AND LASIECKA, IRENA; MATHEMATICAL SCIENCES: BOUNDARY CONTROL PROBLEMS FOR PARABOLIC AND HYPERBOLIC PARTIAL EQUATIONS (MCS-8102837 A01*); 12 MONTHS \$22,478

CHILDERS, DONALD G, AND MOORE, G PAUL; VOCAL FOLD VIBRATION AND SPEECH (ECS-8116341*); 12 MONTHS \$30,000

KAMEN, EDWARD W, AND KHARGONEKAR, P F; A TRANSFER FUNCTION TYPE APPROACH TO LINEAR TIME-VARYING SYSTEMS (ECS-8200607); 24 MONTHS \$64,998

BURK, DOROTHEA E; RESEARCH INITIATION: INVESTIGATION OF ELECTRICAL PARAMETERS IN HIGHLY-DOPED SILICON AND INFORMED DEVICE DESIGN (ECS-8205236); 24 MONTHS \$48,000

UNIVERSITY OF MIAMI

JURY, ELIAHU I; RESEARCH IN TWO-AND-MULTIDIMENSIONAL DIGITAL FILTERS (ECS-8116847); 12 MONTHS \$35,093

GEORGIA

GEORGIA INSTITUTE OF TECHNOLOGY MAIN CAMPUS

JEROSLOW, ROBERT G; NONLINEAR PROGRAMMING AND CUTTING-PLANE THEORY (ECS-8001763 A02*); 12 MONTHS \$18,479

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SMITH, GLENN S; SUBMINIATURE IMPLANTABLE ELECTRIC FIELD PROBES FOR MICROWAVE DOSIMETRY AND BIOLOGICAL SYSTEMS (ECS-8105163 A01); 12 MONTHS \$20,427

GAYLORD, THOMAS K, AND MOHARAM, M G; INDUSTRY-UNIVERSITY COLLABORATIVE RESEARCH (IUCR): TWODIMENSIONAL OPTICAL PARALLEL DIGITAL WORK/SIGNATURE DETECTOR (ECS-8106683*); 36 MONTHS \$50,000

PINEDO, MICHAEL L; STOCHASTIC SCHEDULING (ECS-8115344); 24 MONTHS \$44,000

LEWIS, FRANK L; RESEARCH INITIATION: EXTENSION OF GEOMETRIC SYSTEM THEORY TO DESCRIPTOR SYSTEMS (ECS-8204656); 12 MONTHS \$22,191

HAYES, MONSON H; RESEARCH INITIATION: SIGNAL RECONSTRUCTION FROM PARTIAL PHASE AND MAGNITUDE INFORMATION (ECS-8204793); 12 MONTHS \$24,552

CLEMENTS, MARK A; NEW ENGINEERING FACULTY RESEARCH INCENTIVE: ADAPTATION AND DEVELOPMENT OF SPEECH RECOGNITION TECHNIQUES AS APPLIED TO IMPROVING COMMUN. FOR INDIVIDUALS WITH HEARING IMPAIRMENTS (ECS-8206409); 12 MONTHS \$10,000

SWAIN, JAMES J; NEW ENGINEERING FACULTY RESEARCH INCENTIVE: CONTROL VARIATE METHODOLOGY APPLIED TO NONLINEAR REGRESSION WITH GENERAL ERROR DISTRIBUTIONS (ECS-8206498); 12 MONTHS \$10,000

AMMONS, JANE C; NEFRI: IMPACT OF TERMINAL CONDITIONS IN LONG RANGE GENERATION EXPANSION PLANNING FOR ELECTRIC UTILITIES (ECS-8206612); 12 MONTHS \$10,000

ILLINOIS

AMERICAN COLLEGE OF RADIOLOGY

LINTON, OTHA W; WORKSHOP IN ENGINEERING RESEARCH AND MEDICAL IMAGING: WASHINGTON, DC, FALL, 1982 (ECS-8205735); 12 MONTHS \$20,000

GOULD INC-GOULD INC GOULD LABORATORIES-ILLINOIS

JORDAN, BERNARD W; EXPLORING PRINCIPLES FOR THE SYSTEMATIC DESIGN OF DISTRIBUTED COMPUTER SYSTEMS (ECS-8217499); 12 MONTHS \$65,000

ILLINOIS INSTITUTE OF TECHNOLOGY

MEERKOV, SEMYON M; STRONGLY DECENTRALIZED CONTROL: THEORY AND APPLICATIONS TO COMMUNICATION NETWORKS (ECS-8116157*); 24 MONTHS \$65,000

DELLER, JOHN R; SPECIALIZED EQUIPMENT: GRAPHICS SUPPORT FOR THE IIT BIOMEDICAL ENGINEERING COMPUTING LABORATORY (ECS-8203289); 12 MONTHS \$8,485

NORTHWESTERN UNIVERSITY

BRODWIN, MORRIS E, AND WHITMORE, DONALD H; STUDIES OF MOBILE ION BEHAVIOR IN CERAMIC ELECTROLYTES USING DYNAMIC EXPERIMENTAL PROBES (DMR-8015803 A01*); 12 MONTHS \$22,000

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HSU, WEN-LIAN; RESEARCH INITIATION: EFFICIENT ALGORITHMS FOR SOME PROBLEMS ON GRAPHS (ECS-8105989 A01); 12 MONTHS \$26,801

HAKIMI, S L, LEE, D T, MEGIDDO, N, AND ZEMEL, E; STUDIES IN LOCATIONS, ALLOCATIONS, AND PLACEMENTS (ECS-8121741); 12 MONTHS \$85,312

HAKIMI, S L; APPLICATIONS OF GRAPH THEORY TO PROBLEMS IN NETWORKS AND FAULT ANALYSIS IN DIGITAL SYSTEMS (ECS-8201387); 24 MONTHS \$60,822

BUTLER, JON T; AN IMPROVED MODEL FOR THE DIAGNOSIS OF FAULTS IN A MULTIPROCESSING SYSTEM (ECS-8203276*); 24 MONTHS \$52,400

UNIVERSITY OF CHICAGO

GOULD, FLOYD J; HOMOTOPY AND PIVOTAL METHODS (ECS-7920177 A02); 12 MONTHS \$47,119

LEVI-SETTI, RICCARDO; INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: DEVELOPMENT OF A NEW HIGH-RESOLUTION SCANNING ION MICROPROBE (DMR-8007978 A03*); 12 MONTHS \$10,000

UNIVERSITY OF ILLINOIS AT CHICAGO CIRCLE

CHANG, SHI-KUO; PICTURE ALGEBRA AND PICTURE DATA STRUCTURES (ECS-8005953 A02); 12 MONTHS \$42,165

MCCORMICK, BRUCE H; MICROPARTICLE BEAM TRANSPORT: A PILOT STUDY (ECS-8024703 A01); 12 MONTHS \$85,000

MINIEKA, EDWARD; OPTIMAL LOCATION OF SERVICE STRUCTURES IN A NETWORK (ECS-8104647 A01); 12 MONTHS \$31,221

GUPTA, MADHU S; THERMAL NOISE IN NONLINEAR RESISTIVE DEVICES (ECS-8116350); 24 MONTHS \$57,417

DYER, CHARLES R; RESEARCH INITIATION: PYRAMID ALGORITHMS AND MACHINES FOR IMAGE PROCESSING (ECS-8204541); 24 MONTHS \$47,757

HAGSTROM, JANE N; RESEARCH INITIATION: ANALYSIS AND DEVELOPMENT OF ALGORITHMS FOR NETWORK RELIABILITY (ECS-8205230); 24 MONTHS \$43,894

MOHER, THOMAS G; RESEARCH INITIATION: INTERACTIVE CONTROL AND VISUALIZATION OF COMPUTER PROGRAM EXECUTION FOR USE IN DYNAMIC DEBUGGING AND TESTING OF COMPUTER PROGRAMS (ECS-8205247); 24 MONTHS \$47,740

UNIVERSITY OF ILLINOIS AT URBANA

JENKINS, W KENNETH; NUMBER THEORETIC CONCEPTS FOR THE REALIZATION OF FAILURE RESISTANT SIGNAL PROCESSORS IN VLSI CIRCUIT TECHNOLOGY (ECS-7901686 A01); 24 MONTHS \$65,994

CRUZ, JOSE B, PERKINS, W R, AND KOKOTOVIC, PETAR V; LARGE SCALE SYSTEMS (ECS-7919396 A02); 12 MONTHS \$140,000

SAH, CHIH-TANG; STUDY OF OXIDE TRAPS AND INTERFACE STATES IN SILICON MICROSTRUCTURES (ECS-8021114 A01); 12 MONTHS \$71,682

HUANG, THOMAS S; MOTION ESTIMATION WITH APPLICATION TO ROBOTICS (ECS-8112082); 24 MONTHS \$90,566

DUNN, FLOYD, AND FRIZELL, LEON A; *FINITE AMPLITUDE ACOUSTIC WAVE PROPAGATION IN MAMMALIAN TISSUES* (ECS-8115206); 12 MONTHS \$70,000

TUCKER, JOHN R; *ELECTRONIC APPLICATIONS OF CHARGE DENSITY WAVE CONDUCTION* (ECS-8120038*); 12 MONTHS \$33,697

LEE, SHUNG-WU, MAGIN, RICHARD L, CAIN, CHARLES A, AND MITTRA, RAJ; *FOCUSED ELECTROMAGNETIC HYPERTHERMIA APPLICATORS* (ECS-8120205); 12 MONTHS \$100,000

MIRMAN, LEONARD J; *GAME THEORETIC APPLICATIONS TO THE ECONOMICS OF PRICING AND INFORMATION* (SES-8200380*); 12 MONTHS \$10,000

HOLONYAK, NICK J; *SHORT WAVELENGTH QUANTUM-WELL HETEROSTRUCTURE LASERS* (ECS-8200517*); 12 MONTHS \$61,520

DE TEMPLE, THOMAS A; *RESONANT PARAMETRIC INTERACTIONS* (ELECTRICAL ENGINEERING) (ECS-8206079); 12 MONTHS \$56,703

INDIANA

INDIANA UNIVERSITY, BLOOMINGTON

CRAIG, JAMES C; *TACTILE PERCEPTION OF SPEECH* (ECS-8017178 A01); 12 MONTHS \$76,338

INDIVIDUAL AWARD

INNOCENTI, MARIO; *NEFRI: ON THE USE OF OPTIMAL CONTROL THEORY FOR SIMULTANEOUS STABILITY AUGMENTATION DESIGN AND PILOT'S EVALUATION OF COMPLEX FLIGHT VEHICLES* (ECS-8206049); 12 MONTHS \$10,000

PURDUE UNIVERSITY

GEDDES, LESLIE A; *A NEW ELECTRICAL METHOD FOR MEASURING THE OUTPUT OF THE HEART* (ECS-7828081 A03); 9 MONTHS \$9,881

BERKOVITZ, LEONARD D; *DIFFERENTIAL GAMES AND OPTIMAL CONTROL* (MCS-7927137 A02*); 12 MONTHS \$10,144

MOSKOWITZ, HERBERT M; *MULTI ATTRIBUTE AND MULTIPLE CRITERIA APPROACHES FOR DETERMINING BAYESIAN ACCEPTANCE PLANS IN QUALITY CONTROL AND AUDITING* (ECS-8007103 A01); 24 MONTHS \$39,006

PIERRET, ROBERT F, AND GUNSHOR, ROBERT L; *IUC: ELECTROPHYSICAL ASPECTS OF MONOLITHIC (ZNO) SAW STRUCTURES* (ECS-8008793 A01*); 12 MONTHS \$68,204

FU, KING-SUN, AND HWANG, KAI; *VLSI MULTIPROCESSOR ARCHITECTURE AND RELATIONAL DATABASE FOR ANALYSIS AND MANAGEMENT OF IMAGERY DATA* (ECS-8016580 A01); 12 MONTHS \$111,602

WHINSTON, ANDREW B; *MANAGEMENT OF LARGE-SCALE MODELS* (ECS-8116135); 12 MONTHS \$23,639

SKELTON, ROBERT E; *SUBOPTIMAL METHODS FOR LARGE SCALE SYSTEMS, ANALYSIS AND CONTROL SYNTHESIS* (ECS-8119598); 12 MONTHS \$72,121

FU, KING-SUN; *STRUCTURAL AND SYNTACTIC PATTERN RECOGNITION* (ECS-8119886); 12 MONTHS \$95,000

SIEGEL, LEAH J, AND SIEGEL, HOWARD J; *PARALLELISM IN SPEECH PROCESSING* (ECS-8120896*); 12 MONTHS \$40,266

GALLAGHER, NEAL C; *MULTI-DIMENSIONAL SAMPLING WITH APPLICATION TO MULTIDIMENSIONAL IMAGING AND DIGITAL HOLOGRAPHY* (ECS-8203754); 24 MONTHS \$110,000

SNYDER, LAWRENCE, SIEGEL, LEAH J, SIEGEL, HOWARD J, AND GANNON, DENNIS; *WORKSHOP ON ALGORITHMICALLY-SPECIALIZED COMPUTER ORGANIZATIONS - PURDUE UNIVERSITY ON SEPTEMBER 29-OCTOBER 1, 1982* (ECS-8206181*); 6 MONTHS \$13,164

UNIVERSITY OF NOTRE DAME

SAIN, MICHAEL K; *DESIGN OF MULTIVARIABLE CONTROL SYSTEMS* (ECS-8102891 A01); 12 MONTHS \$54,201

MELSA, JAMES L, AND SAIN, MICHAEL K; *EXPANSION OF HIGH SPEED DATA ACQUISITION, PROCESSING AND DISPLAY SYSTEM* (ECS-8119556*); 12 MONTHS \$30,000

ROHRS, CHARLES E; *NEW ENGINEERING FACULTY RESEARCH INCENTIVE: PRACTICAL ADAPTIVE CONTROL (SYSTEMS ENGINEERING)* (ECS-8206495); 12 MONTHS \$10,000

IOWA

IOWA STATE UNIVERSITY OF SCIENCE & TECHNOLOGY

MICHEL, ANTHONY N; *QUALITATIVE ANALYSIS OF COMPLEX DYNAMICAL SYSTEMS* (ECS-8100690 A01); 12 MONTHS \$50,000

UNIVERSITY OF IOWA

LONNGREN, KARL E; *STUDY OF NONLINEAR WAVE PLASMA INTERACTIONS* (ECS-8019363 A02); 12 MONTHS \$64,000

KORPEL, ADRIANUS; *NONLINEAR ACOUSTIC WAVE EFFECTS INCLUDING ACOUSTO-OPTIC INTERACTIONS* (ECS-8121781); 12 MONTHS \$76,000

KUHL, JON G; *RESEARCH INITIATION: DESIGN OF HIGHLY RELIABLE DISTRIBUTED COMPUTING NETWORKS* (ECS-8206188); 24 MONTHS \$47,956

KANSAS

UNIVERSITY OF KANSAS MAIN CAMPUS

DUNCAN, TYRONE E; *GEOMETRIC SYSTEMS APPROACH TO THE ANALYSIS AND CONTROL OF NONLINEAR SYSTEMS APPLICABLE TO ELECTRICAL MACHINES* (ECS-8024917 A01*); 24 MONTHS \$22,000

UNIVERSITY OF KANSAS MEDICAL CENTER

COOK, LARRY J; *VOLUME AND SURFACE AREA ALGORITHMS* (ECS-8108810); 24 MONTHS \$36,683

KENTUCKY

UNIVERSITY OF KENTUCKY

RISHEL, RAYMOND W; *OPTIMAL CONTROL OF JUMP PROCESSES* (ECS-8102892 A01); 12 MONTHS \$27,815

NASAR, S A; *SUSTAINED OSCILLATIONS IN LINEAR ELECTRIC MACHINES* (ECS-8111624); 24 MONTHS \$96,200

LOUISIANA

UNIVERSITY OF SOUTHWESTERN LOUISIANA

LINN, CATHY J; *RESEARCH INITIATION: IMPROVEMENT IN SYSTEM PERFORMANCE THROUGH ALTERNATIVE CACHE ARCHITECTURES* (ECS-8119493); 22 MONTHS \$38,962

LINN, JOSEPH L; *RESEARCH INITIATION: COMPACT PARSER CONSTRUCTION VIA INCREASED USE OF PREDICTION* (ECS-8119494); 22 MONTHS \$38,962

MAINE

UNIVERSITY OF MAINE, ORONO

VETELINO, JOHN F, AND LEE, DONALD L; *THE STUDY OF SURFACE GENERATED BULK WAVES IN QUARTZ FOR APPLICATIONS REQUIRING HIGH TEMPERATURE STABILITY* (ECS-8113429); 24 MONTHS \$105,477

MARYLAND

CAPITAL SYSTEMS GROUP INC

CLANSKY, KENNETH B; *SUPPORT SERVICES FOR RESEARCH INFORMATION PROCESSING DISSEMINATION PROGRAMS* (08G-8020049 A02*); 12 MONTHS \$40,000

CHESAPEAKE RESEARCH CONSORTIUM INC

ULANOWICZ, ROBERT E, AND GOLDMAN, ALAN J; *SELF-ORGANIZATION IN DISSIPATIVE SYSTEMS: A PERTURBED OPTIMIZATION MODEL* (ECS-8110035); 12 MONTHS \$55,123

CONSOLIDATED VISUAL CENTER

NORRIS, THOMAS R; *GRAPHIC ARTS SERVICES* (19M-8122157 A03); \$1,000

JOHNS HOPKINS UNIVERSITY

GOLDSTEIN, MOISE H, AND HEINZ, JOHN M; *CUTANEOUS COMMUNICATION AIDS FOR THE DEAF* (ECS-8109421); 12 MONTHS \$64,998

FILAR, JERZY A; *RESEARCH INITIATION: PROBLEMS IN STOCHASTIC GAMES AND DISCRETE DYNAMIC PROGRAMMING ARISING OUT OF THE TRAVELLING INSPECTOR MODEL* (ECS-8204677); 24 MONTHS \$33,326

UNIVERSITY OF MARYLAND BALTIMORE PROF SCHOOLS

HARRISON, GEORGE H; *UNIFORM INSONATION AND ULTRASONIC BIOPHYSICS* (ECS-8121566); 12 MONTHS \$69,958

UNIVERSITY OF MARYLAND, COLLEGE PARK

LEE, CHI H; *PHOTOCONDUCTIVITY EFFECTS IN SEMICONDUCTORS FOR PICOSECOND OPTOELECTRONIC DEVICES* (ECS-7906862 A04); 12 MONTHS \$52,000

ROSENFELD, AZRIEL, AND O'LEARY, DIANNE P; *REPRESENTATION AND CONTROL IN COMPUTER VISION: MULTILEVEL RELAXATION APPROACHES* (MCS-7923423 A02*); 12 MONTHS \$34,700

DAVIS, CHRISTOPH C; *AN INVESTIGATION OF THE CAPABILITIES OF PHASE FLUCTUATION ON OPTICAL HETERODYNE TECHNIQUES* (ECS-8023769 A01); 12 MONTHS \$50,000

NEWCOMB, ROBERT W; *CHAOTIC RESISTORS AND TURING-SMALE SYSTEMS* (ECS-8105507); 18 MONTHS \$46,673

KRISHNAPRASAD, P S; *NONLINEAR CONTROL THEORY AND THE GENERALIZED RIGID BODY PROBLEM* (ECS-8118138); 12 MONTHS \$29,644

NARAYAN, PRAKASH; *RESEARCH INITIATION: THE STUDY OF THE CUTOFF-RATE REGION FOR MULTIPLE-USER COMMUNICATION SYSTEMS & ITS IMPLICATIONS FOR THEIR DESIGN & PERFORMANCE* (ECS-8204449); 12 MONTHS \$22,978

MAKOWSKI, ARMAND M; *RESEARCH INITIATION: GENERIC CONTROL PROBLEMS FOR QUEUEING MODELS IN COMPUTER COMMUNICATION NETWORKS* (ECS-8204451*); 12 MONTHS \$22,278

TITS, ANDRE L; *RESEARCH INITIATION: EFFICIENT ALGORITHMS FOR OPTIMAL DESIGN OF ENGINEERING SYSTEMS* (ECS-8204452); 24 MONTHS \$43,280

MASSACHUSETTS

BOSTON COLLEGE

KALMAN, GABOR; *RESEARCH IN STRONGLY COUPLED PLASMAS* (ECS-8118616 A01*); 12 MONTHS \$23,641

KALMAN, GABOR; *RESEARCH IN STRONGLY COUPLED PLASMAS* (ECS-8118616 A02); \$13,636

HARVARD UNIVERSITY

BROCKETT, ROGER W, AND BYRNES, C I; *CONTROL THEORY AND DYNAMICAL SYSTEMS* (ECS-8121428*); 24 MONTHS \$42,300

SHUM, ANNIE W; *QUEUEING METHODOLOGY FOR PERFORMANCE EVALUATION OF DATABASE SYSTEMS* (ECS-8203925); 12 MONTHS \$31,684

INDIVIDUAL AWARD

KETCHUM, JOHN W; *NEFRI: RECEIVER PROCESSING TECHNIQUES AND RECEIVER OPTIMIZATION FOR DIRECT SEQUENCE SPREAD SPECTRUM COMMUNICATION OVER DISPERSIVE CHANNELS WITH NARROWBAND INTERFERENCE* (ECS-8206408); 12 MONTHS \$10,000

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

HAUS, HERMANN A. AND FONSTAD, CLIFTON G.; DEVICES FOR HIGH-RATE OPTICAL COMMUNICATIONS (ECS-7919475 A02); 12 MONTHS \$70,000
 GALLAGER, ROBERT G.; THE DYNAMICS OF DATA NETWORK RESEARCH (ECS-7919880 A02*); 12 MONTHS \$88,000

BERTSEKAS, DIMITRI P.; COMPUTATIONAL METHODS FOR NONLINEAR PROGRAMMING AND OPTIMAL CONTROL (ECS-7920834 A02); 12 MONTHS \$61,565

GATOS, HARRY C. AND LAGOWSKI, JACEK; NEW APPROACHES TO THE PREPARATION AND CHARACTERIZATION OF GAAS STRUCTURES FOR DEVICE APPLICATIONS (ECS-7923741 A02*); 12 MONTHS \$49,000

MAGNANTI, THOMAS L.; NETWORK ANALYSIS AND OPTIMIZATION (ECS-7926225 A02); 12 MONTHS \$69,586

OPPENHEIM, ALAN V. AND LIM, JAE S.; RESEARCH IN MULTI-DIMENSIONAL SIGNAL PROCESSING (ECS-8007102 A01); 12 MONTHS \$80,000

HAUS, HERMANN A.; PICOSECOND OPTICAL SIGNAL SAMPLING DEVICE (ECS-8008752 A02); 12 MONTHS \$44,000

WILLSKY, ALAN S. AND LEVY, BERNARD C.; ESTIMATION AND STATISTICAL ANALYSIS OF SPATIALLY-DISTRIBUTED RANDOM PROCESSES (ECS-8012668 A01*); 12 MONTHS \$77,201

MELNGAILIS, JOHN; COUPLING OF SURFACE ACOUSTIC WAVES IN GRATINGS TO BULK PLATE MODES - PROPERTIES AND APPLICATIONS (ECS-8017705 A01); 12 MONTHS \$45,600

LAX, BENJAMIN; NONLINEAR EXPERIMENTS ON A FREE ELECTRON LASER IN VARIOUS MAGNET STRUCTURES (ECS-8019634 A01); 12 MONTHS \$92,000

IPPEN, ERICH P.; PICOSECOND OPTO-ELECTRONIC DEVICE STUDIES (ECS-8020639 A01); 12 MONTHS \$97,000

FLOWERS, WOODIE C.; MICROCOMPUTER-CONTROLLED, INDIVIDUALIZED, MULTIMODE PROSTHESIS FOR LOWER EXTREMITY AMPUTEES (ECS-8023193 A01); 12 MONTHS \$90,000

SENTURIA, STEPHEN D.; INTEGRATED SENSING DEVICES BASED ON THE CHARGE-FLOW TRANSISTOR (ECS-8114781); 12 MONTHS \$72,000

SHAPIRO, JEREMY F.; LAGRANGIAN TECHNIQUES FOR PARAMETRIC MIXED INTEGER PROGRAMMING (ECS-8117105*); 24 MONTHS \$49,307

TEMKIN, RICHARD J. AND COHN, DANIEL R.; TUNABLE FAR INFRARED LASERS (ECS-8117229); 12 MONTHS \$78,841

GLASSER, LANCE A. AND PENFIELD, PAUL; A CIRCUIT THEORY FOR DIGITAL VLSI SYSTEMS (ECS-8118160); 12 MONTHS \$65,000

PENFIELD, PAUL; CONFERENCE ON ADVANCED RESEARCH IN VLSI, JANUARY 1982 (ECS-8118430); 9 MONTHS \$14,350

SHAPIRO, JEFFREY H. AND EPSTEIN, DAVID J.; OPTICAL COMMUNICATION SYSTEMS FOR IMPROVED LOW-VISIBILITY COMMUNICATION IN NETWORKS ENVIRONMENTS (ECS-8120637); 12 MONTHS \$90,000

COHEN, RICHARD J.; RANDOM PROCESS ANALYSIS OF BEAT-TO-BEAT FLUCTUATIONS IN ELECTROCARDIOGRAPHIC AND HEMODYNAMIC PARAMETERS (ECS-8121571); 12 MONTHS \$55,000

BERS, ABRAHAM, AND BEKEFI, GEORGE; PLASMA DYNAMICS (ECS-8200461); 6 MONTHS \$170,000

KONG, JIN-AU; REMOTE SENSING WITH ELECTROMAGNETIC WAVES (ECS-8203390); 12 MONTHS \$50,000

LARSON, RICHARD C.; FACILITY LOCATION PROBLEMS WITH RANDOM SERVICE DEMANDS (ECS-8204318); 12 MONTHS \$40,148

ORLANDO, TERRY P.; RESEARCH INITIATION: SUPERCONDUCTIVE TUNNELING AND PROPERTIES OF VANADIUM-BASED MATERIALS (ECS-8205013); 24 MONTHS \$48,000

ORLIN, JAMES B.; RESEARCH INITIATION: DYNAMIC/PERIODIC OPTIMIZATION MODELS (ECS-8205022); 24 MONTHS \$44,861

SMITH, HENRY I.; INVESTIGATIONS OF GRAPHOPHETAX WITH OPTIMUM MATERIALS AND GROWTH PROCESSES (ECS-8205701); 12 MONTHS \$105,000

WALKER, BRUCE K.; COMPLEXITY REDUCTION TECHNIQUES FOR GENERALIZED MODELS OF REDUNDANT SYSTEMS (ECS-8205789); 19 MONTHS \$40,650

MITTER, SANJOY K.; WORKSHOP ON THE INTERFACE OF OPERATIONS RESEARCH AND SYSTEMS THEORY (SEPTEMBER 30 - OCTOBER 1, 1982) (ECS-8209385*); 8 MONTHS \$16,000

NORTHEASTERN UNIVERSITY

SILEVITCH, MICHAEL B.; ON THE PROPERTIES OF A HIGH VOLTAGE 60HZ CROSSED-FIELD DISCHARGE (ECS-8023768 A01); 12 MONTHS \$47,654

WARGA, JACK; OPTIMAL CONTROL AND OPTIMIZATION (MCS-8102079 A01*); 12 MONTHS \$15,157

GOLDEN, KENNETH I.; RESEARCH IN STRONGLY COUPLED PLASMAS (ECS-8107449 A01); 12 MONTHS \$22,500

BARD, JONATHAN F.; MULTI-LEVEL PROGRAMMING (ECS-8118185); 8 MONTHS \$7,826

PROAKIS, JOHN G.; ADAPTIVE ALGORITHMS FOR SYSTEM IDENTIFICATION AND EQUALIZATION OF TIME-VARIANT MULTIPATH CHANNELS (ECS-8205596); 12 MONTHS \$27,439

UNIVERSITY OF MASSACHUSETTS, AMHERST

WOLF, JACK K. AND TOWSLEY, DONALD F.; ON THE ANALYSIS AND SYNTHESIS OF COMPUTER COMMUNICATION NETWORKS (ECS-7921140 A02); 12 MONTHS \$59,981

ARBIB, MICHAEL A.; VISUO-TACTILE COORDINATION FOR ROBOT CONTROL (ECS-8108818); 12 MONTHS \$101,263

DJAFERIS, THEODORE E.; RESEARCH IN MODEL REFERENCE ADAPTIVE CONTROL OF CONTINUOUS TIME SYSTEMS (ECS-8111255); 12 MONTHS \$14,420

NAVON, DAVID H.; NUMERICAL MODELING OF SEMICONDUCTOR MICRODEVICES (ECS-8115008); 12 MONTHS \$59,930

MCINTOSH, ROBERT E.; A STUDY OF THE OPTIMAL DESIGN OF ELECTROMAGNETIC PULSE RADIATORS (ECS-8116158); 12 MONTHS \$42,000

KOHLER, WALTER H., TOWSLEY, DONALD F. AND STANKOVIC, JOHN A.; CONCURRENCY CONTROL AND RECOVERY ALGORITHMS FOR DISTRIBUTED TRANSACTION PROCESSING SYSTEMS (ECS-8120931); 12 MONTHS \$62,075

RISEMAN, EDWARD M.; SPECIALIZED RESEARCH EQUIPMENT: SENSORY PROCESSING SYSTEM AND MASS STORAGE FOR VISUO-TACTILE ROBOT CONTROL (ECS-8203280*); 12 MONTHS \$48,000

MC GREE, THOMAS P.; RESEARCH INITIATION: SIGNAL SET DESIGN FOR SPREAD SPECTRUM (ECS-8204634); 12 MONTHS \$22,869

CARLSON, DAVID A.; RESEARCH INITIATION: ANALYSIS OF RESOURCE TRADEOFFS IN COMPUTING (ECS-8204894); 24 MONTHS \$47,998

ELLIOTT, HOWARD; HYBRID ADAPTIVE CONTROL OF MULTIVARIABLE SYSTEMS (ECS-8214534); 15 MONTHS \$43,935

WORCESTER POLYTECHNIC INSTITUTE

SCHALKOFF, ROBERT J.; RESEARCH INITIATION: SCENE MODELLING AND ALGORITHM DEVELOPMENT FOR AUTOMATIC VIDEO TRACKING SYSTEMS (ECS-8204472); 24 MONTHS \$48,006

MICHIGAN

MICHIGAN STATE UNIVERSITY

JAIN, ANIL K. AND DUBES, RICHARD C.; STRUCTURE OF MULTIDIMENSIONAL PATTERNS (ECS-8007106 A02); 12 MONTHS \$65,925

KHALIL, HASSAN K.; STABILITY OF SINGULARLY PERTURBED SYSTEMS WITH APPLICATION TO DECENTRALIZED CONTROL (ECS-8205337); 24 MONTHS \$49,997

UNIVERSITY OF MICHIGAN-ANN ARBOR

LEITH, EMMETT N.; ACHROMATIC INTERFEROMETRY USING HOLOGRAPHIC OPTICAL ELEMENTS (ECS-7901647 A02); 12 MONTHS \$50,962

GETTY, WARD D.; LINEAR AND NONLINEAR WAVE PROPAGATION IN MAGNETIC-MIRROR-CONFINED PLASMA (ECS-8025510 A01); 12 MONTHS \$52,000

LEE, C. S. GEORGE; ADVANCED CONTROL FOR MULTIROBOT ASSEMBLY SYSTEMS (ECS-8106954*); 24 MONTHS \$75,000

TAI, CHEN-TO; SINGULARITY BEHAVIOR OF DYADIC GREEN'S FUNCTIONS (ELECTRICAL ENGINEERING) (ECS-8120936); 12 MONTHS \$35,015

NARASIMHAMURTHI, NATARAJA; RESEARCH INITIATION: MATHEMATICAL THEORY OF POWER SYSTEM DYNAMIC EQUIVALENTS (ECS-8205163); 12 MONTHS \$20,883

WAYNE STATE UNIVERSITY

KHO, IAM-CHOON; OPTICAL WAVE MIXING IN NEMATIC LIQUID CRYSTALS (ECS-8026775 A01); 12 MONTHS \$31,800

MINNESOTA

UNIVERSITY OF MINNESOTA

KAVEH, MOSTAFA, AND MUELLER, R. K.; DIFFRACTION TOMOGRAPHY (ECS-7926008 A02); 12 MONTHS \$111,762

VAN DER ZIEL, A.; FLICKER NOISE IN SEMICONDUCTORS AND SEMICONDUCTOR DEVICES (ECS-8025810 A01); 12 MONTHS \$57,687

KAVEH, MOSTAFA; DATA ADAPTIVE WIDEBAND ARRAY PROCESSING (ECS-8105962); 24 MONTHS \$78,907

BOLEY, DANIEL; RESEARCH INITIATION: NUMERICAL PROBLEMS IN LINEAR CONTROL THEORY (ECS-8204468); 24 MONTHS \$33,319

UNIVERSITY OF MINNESOTA AT SAINT PAUL

ROBBINS, WILLIAM P.; MAGNETIC THIN FILMS FOR SURFACE ACOUSTIC WAVE DEVICES (ECS-7924366 A02); 12 MONTHS \$55,000

MISSISSIPPI

UNIVERSITY OF MISSISSIPPI

GLISSON, ALLEN W.; RESEARCH INITIATION: ELECTROMAGNETIC SCATTERING BY INHOMOGENEOUS DIELECTRIC BODIES OF ARBITRARY SHAPE (ECS-8204683); 24 MONTHS \$47,992

MISSOURI

UNIVERSITY OF MISSOURI, COLUMBIA

CHARLSON, ELAINE M.; RESEARCH INITIATION: OPTIMIZATION AND STABILITY OF SILICON OXYNITRIDE MIS STRUCTURES (ECS-8204622); 24 MONTHS \$47,963

WASHINGTON UNIVERSITY

PICKARD, WILLIAM F.; MICROWAVE INDUCED RESTING POTENTIAL SHIFTS IN CHARA (ECS-8105485); 24 MONTHS \$99,953

SNYDER, DONALD L.; ESTIMATION AND DECISION FOR RANDOM POINT PROCESSES (ECS-8113266); 24 MONTHS \$86,996

NEBRASKA

UNIVERSITY OF NEBRASKA AT LINCOLN

NAGY, GEORGE, AND BROGAN, WILLIAM L.; ANALYTICAL STUDY OF DIGITAL IMAGE REGISTRATION (ECS-8105202); 24 MONTHS \$85,000

NEW JERSEY

INDIVIDUAL AWARD

COYLE, EDWARD J.; NEFRI: ANALYSIS AD IMPROVEMENT OF THE PERFORMANCE OF RANDOM ACCESS PROTOCOLS (ECS-8206407); 12 MONTHS \$10,000

YANO, CANDACE A.; NEFRI: LEADTIME UNCERTAINTY IN MULTICHELON (ECS-8206499); 12 MONTHS \$10,000

PRINCETON UNIVERSITY

LIU, BEDE, AND THOMAS, JOHN B; DISCRETE TIME SIGNALS AND THEIR PROCESSING (ECS-7915915 A02); 12 MONTHS \$80,511
 MILES, RICHARD B; PICOSECOND NONLINEAR RAMAN SPECTROSCOPY OF SURFACES (ECS-8017655 A01); 12 MONTHS \$59,885
 STEIGLITZ, KENNETH; DIGITAL SIGNAL PROCESSING AND VERY LARGE SCALE INTEGRATED (VLSI) IMPLEMENTATION (ECS-8120037); 12 MONTHS \$50,184

DICKINSON, BRADLEY W; ALGORITHMS AND STRUCTURES FOR DIGITAL SIGNAL PROCESSING (ECS-8205772); 24 MONTHS \$91,081

RUTGERS UNIVERSITY-BUSCH CAMPUS

ALBIN, SUSAN L; RESEARCH INITIATION: A HYBRID APPROXIMATION FOR QUEUEING NETWORKS (ECS-8204635); 24 MONTHS \$44,010

RUTGERS UNIVERSITY

MICHEL-TZANAKO, EVANGELI; RESEARCH INITIATION: SPATIO-TEMPORAL CHARACTERISTICS OF VISUAL RECEPTIVE FIELDS (ECS-8205245); 24 MONTHS \$48,000

STEVENS INSTITUTE OF TECHNOLOGY

BOESCH, FRANCIS T; SURVIVABILITY CRITERIA FOR THE DESIGN AND ANALYSIS OF OPTIMUM LARGE-SCALE NETWORKS (ECS-8100652 A01*); 12 MONTHS \$43,835

VAN SLYKE, RICHARD M; TRAFFIC ESTIMATES FOR TELECOMMUNICATION NETWORKS (ECS-8115349*); 12 MONTHS \$30,024

COTELLESA, ROBERT F; PHASE I - PLANNING AND PREPARATION FOR A CONFERENCE ON RESEARCH IN THE COMPUTER-BASED INFORMATION SCIENCES AND ENGINEERING (ENG-8213212); 6 MONTHS \$9,950

COTELLESA, ROBERT F; INFORMATION TECHNOLOGY WORKSHOP (ENG-8217992); 6 MONTHS \$68,000

NEW MEXICO

UNIVERSITY OF NEW MEXICO

KIM, JIN J; INVESTIGATIONS OF THE COPPER VAPOR LASER EXCITED BY AN ULTRAFAST ELECTRICAL DISCHARGE (ECS-8206878*); 12 MONTHS \$49,284

NEW YORK

CITY COLLEGE

GOLDFARB, DONALD; ALGORITHMS FOR NONLINEAR PROGRAMMING (MCS-8006065 A01*); 24 MONTHS \$10,000

CLARKSON COLLEGE OF TECHNOLOGY

MCGRATH, PAUL B; AN ULTRA HIGH SPEED BREAKDOWN STUDY (ECS-7914622 A02); 12 MONTHS \$46,367

COLUMBIA UNIVERSITY

DOBELLE, WILLIAM H; ELECTRICAL STIMULATION OF SKIN AS THE BASIS FOR SENSORY PROSTHESES (ECS-7917634 A02); 12 MONTHS \$45,000
 SCHWARTZ, MISCHA, AND STERN, THOMAS E; INDUSTRY-UNIVERSITY COOPERATIVE RESEARCH: DATA NETWORKS AND SATELLITE COMMUNICATIONS (ECS-7925092 A02*); 12 MONTHS \$88,527

SCHWARTZ, MISCHA, AND STERN, THOMAS E; PROBLEMS IN INTEGRATED DIGITAL NETWORKS (ECS-8108778); 12 MONTHS \$95,649

SEN, AMIYA K, AND NAVRATIL, GERALD A; TRAPPED PARTICLE INSTABILITIES AND PLASMA TRANSPORT (ECS-8113183); 12 MONTHS \$112,830

YANG, EDWARD S; INTERFACE CARRIER TRANSPORT AND JUNCTION INTERACTION IN SEMICONDUCTOR DEVICES (ECS-8116163); 12 MONTHS \$30,930

KLEIN, GEORGE; RESEARCH INITIATION: PRACTICAL CONSIDERATIONS FOR NONINTERSECTING CONTROL SYNTHESIS (ECS-8201950); 24 MONTHS \$44,777

PRUCNAL, PAUL R; FREQUENCY SHIFT KEY (FSK) MODULATION FOR FIBER-OPTIC COMMUNICATIONS (ECS-8207610); 12 MONTHS \$24,000

CORNELL UNIVERSITY

WOLF, EDWARD D; NATIONAL RESEARCH AND RESOURCE FACILITY FOR SUBMICRON STRUCTURES (ECS-7709688 A05); 8 MONTHS \$700,000

JACKSON, PETER L; RESEARCH INITIATION: SOLVING STAIRCASE SYSTEMS USING SYMMETRIC BASIS DECOMPOSITION (ECS-8106455 A01); 12 MONTHS \$24,582

TROTTER, LESLIE E; INVESTIGATIONS IN DISCRETE OPTIMIZATION (ECS-8113534); 12 MONTHS \$33,331

WOLF, EDWARD D; NATIONAL RESEARCH AND RESOURCE FACILITY FOR SUBMICRON STRUCTURES (ECS-8200312*); 12 MONTHS \$600,000

WOLF, EDWARD D; NATIONAL RESEARCH AND RESOURCE FACILITY FOR SUBMICRON STRUCTURES (08S-8200312 A01*); 12 MONTHS \$200,000

CORNELL UNIVERSITY-CORNELL UNIVERSITY - ENDOWED

TODD, MICHAEL J; SPECIAL STRUCTURE IN SIMPLICIAL ALGORITHMS (ECS-7921279 A02*); 12 MONTHS \$14,154

NEMHAUSER, GEORGE L; TOPICS IN COMBINATORIAL OPTIMIZATION AND ITS APPLICATION (ECS-8005350 A02); 12 MONTHS \$79,814

TAGQU, MURAD S; NON-GAUSSIAN SELF-SIMILAR PROCESSES (ECS-8015585 A01); 12 MONTHS \$37,504

TANG, C L, AND BALLANTYNE, JOSEPH M; NONLINEAR AND ACTIVE OPTICAL DEVICES (ECS-8116560); 12 MONTHS \$89,620

CARLIN, HERBERT J; THEORY AND DESIGN OF HIGH FREQUENCY COUPLING STRUCTURES (ECS-8117875); 12 MONTHS \$54,050

JOHNSON, C RICHARD; ADAPTIVE DIGITAL FILTER ALGORITHMS FOR ENHANCED SYSTEM PERFORMANCE (ECS-8119312*); 12 MONTHS \$54,650

JOHNSON, C RICHARD; ADAPTIVE DIGITAL FILTER ALGORITHMS (ECS-8120998); 10 MONTHS \$16,486

HEEGARD, CHRIS; RESEARCH INITIATION: RELIABLE STORAGE IN COMPUTER MEMORY (ECS-8204886); 24 MONTHS \$48,000

ILIC-SPONG, MARJIA L; RESEARCH INITIATION: THE DEVELOPMENT OF ELECTRIC POWER NETWORK THEOREMS FOR THE STEADY STATE POWER SYSTEMS EQUIVALENCING (ECS-8214143); 12 MONTHS \$17,589

SPONG, MARK W; RESEARCH INITIATION: GENERALIZED LINEAR DYNAMICAL SYSTEMS OVER COMMUTATIVE RINGS (ECS-8214262); 24 MONTHS \$44,445

CUNY GRADUATE SCHOOL AND UNIVERSITY CENTER

AUSLANDER, LOUIS; INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: THE ALGORITHMS OF DIGITAL SIGNAL PROCESSING (ECS-7921291 A02*); 12 MONTHS \$32,301

INSTITUTE OF ELECTRICAL & ELECTRONIC ENGRS INC

LIU, BEDE; GROUP TRAVEL TO ATTEND IEEE INTERNATIONAL SYMPOSIUM ON CIRCUITS AND SYSTEMS: ROME, ITALY: MAY 10-12, 1982 (ECS-8207304*); 6 MONTHS \$9,200

BARTOLINI, ROBERT A; TRAVEL OF U.S. REPRESENTATIVE TO THE EUROPEAN CONFERENCE ON OPTICAL SYSTEMS AND APPLICATIONS, SEPTEMBER 7-10, 1982, EDINBURGH, SCOTLAND (ECS-8208728); 6 MONTHS \$1,307

NEW YORK UNIVERSITY

SCHWARTZ, JACOB T; THE VLSI SOFTWARE ARCHITECTURES LABORATORY ORIENTED TOWARD LARGE-SCALE PARALLELISM (MCS-7921258 A02*); 12 MONTHS \$81,000

SPERLING, GEORGE; LOW BANDWIDTH VIDEO COMMUNICATION FOR THE DEAF (ECS-8017189 A01); 12 MONTHS \$105,258

POLYTECHNIC INSTITUTE OF NEW YORK

TAMIR, THEODOR; HIGH ABSORPTION OF ELECTROMAGNETIC RADIATION BY STRUCTURES (ECS-7902879 A02); 12 MONTHS \$51,554

GARETZ, BRUCE A; MOLECULAR TWO-PHOTON POLARIZATION SPECTROSCOPY (ECS-7908109 A02); 12 MONTHS \$42,000

RENSSELAER POLYTECHNIC INSTITUTE

DAS, PANKAJ K; THIN FILM RESIDUAL STRESS MEASUREMENTS USING SAW WITH APPLICATIONS IN SILICON TECHNOLOGY (ECS-7918211 A02); 12 MONTHS \$44,000

BORREGO, JOSE M; OPTICAL-MICROWAVE INTERACTIONS IN MESFETS AND IMPATTS (ECS-7924399 A02); 12 MONTHS \$65,000

KAUFMAN, HOWARD, AND WOODS, JOHN W; TWO-DIMENSIONAL RECURSIVE ESTIMATION WITH APPLICATION TO REAL-TIME FILTERING OF IMAGES (ECS-8012569 A01*); 12 MONTHS \$63,000

KAUFMAN, HOWARD, AND BALAS, MARK J; PARAMETER ESTIMATION AND ADAPTIVE CONTROL OF LARGE SCALE AND DISTRIBUTED PARAMETER SYSTEMS (ECS-8016173 A01); 12 MONTHS \$63,550

ROY, ROB J, KAUFMAN, HOWARD, AND SHIN, KANG G; ADAPTIVE CONTROL OF CARDIOVASCULAR DYNAMICS (ECS-8016225 A01); 12 MONTHS \$81,730

TIERSTEN, HARRY F, MCDONALD, JOHN F, AND DAS, PANKAJ K; MONOLITHIC MOSAIC TRANSDUCERS UTILIZING TRAPPED ENERGY MODES (ECS-8024297 A01); 12 MONTHS \$38,000

WOODS, JOHN W; TWO-DIMENSIONAL RECURSIVE DIGITAL FILTERING (ECS-8108806); 12 MONTHS \$43,000

STARK, HENRY; IMAGE RESTORATION WITH APPLICATIONS TO TOMOGRAPHY AND OPTICS (ECS-8111265); 24 MONTHS \$99,995

FREEMAN, HERBERT; EFFICIENT REPRESENTATION SCHEMES FOR LINE-DRAWING DATA (ECS-8111619); 18 MONTHS \$78,000

MODESTINO, JAMES W; STOCHASTIC IMAGE MODELING AND APPLICATIONS (ECS-8113432); 24 MONTHS \$89,995

SARIDIS, GEORGE N; ADVANCED INTELLIGENT CONTROL FOR TRAINABLE MANIPULATORS (ECS-8116834 A01); 12 MONTHS \$95,001

PEARLMAN, WILLIAM A; IMAGE CODING AND FILTERING WITH SQUARED-ERROR AND VISUAL-ERROR DISTORTION MEASURES (ECS-8117410); 12 MONTHS \$39,051

MIRCHANDANI, PITU B, YEE, JAMES R, AND WONG, RICHARD T; ROUTING IN STOCHASTIC NETWORKS (ECS-8117876*); 12 MONTHS \$50,000

MANITIUS, ANDRZEJ Z; OPTIMAL CONTROL OF HEREDITARY SYSTEMS (MATHEMATICAL SCIENCES) (MCS-8201719*); 24 MONTHS \$25,000

GHANDHI, SORAB K; METALORGANIC GROWTH OF THREE-FIVE COMPOUNDS (ELECTRICAL ENGINEERING) (ECS-8201838); 12 MONTHS \$65,000

BURT, PETER J; FAST PYRAMID ALGORITHMS FOR TEXTURE AND MOTION ANALYSIS AND IMAGE COMPRESSION (ECS-8205321); 12 MONTHS \$80,000

CORELLI, JOHN C; PHOTOEXCITATION STUDY OF DEFECTS INDUCED IN THE PROCESSING OF SILICON FOR DEVICES (ECS-8209298); 12 MONTHS \$48,000

STATE UNIVERSITY AT STONY BROOK

SHAPIRO, STEPHEN D; THE HOUGH TRANSFORM: PROPERTIES, IMPLEMENTATION AND GENERALIZATION FOR IMAGE PROCESSING (ECS-8106544 A01); 12 MONTHS \$66,958

SUSSMAN-FORT, STEPHEN E; MICROWAVE ACTIVE FILTERS (ECS-8117453); 24 MONTHS \$50,799

ZEMANIAN, ARNEN H; INFINITE ELECTRICAL NETWORKS WITH APPLICATION TO VERY LARGE SCALE INTEGRATED (VLSI) CIRCUITS AND GEOPHYSICAL EXPLORATION (ECS-8121715); 12 MONTHS \$18,000

SYRACUSE UNIVERSITY

HARRINGTON, ROGER F; ELECTROMAGNETIC COUPLING THROUGH HOLES, SLOTS, AND CAVITIES IN THICK CONDUCTORS (ECS-7921354 A02); 12 MONTHS \$31,970

RUDOLPH, LUTHER D. AND HARTMANN, CARLOS R. *THE THEORY OF DECODING AND EFFICIENT DECODING TECHNIQUES FOR ERROR-CORRECTING CODES* (ECS-8201761); 12 MONTHS \$45,932

KOWEL, STEPHEN T. AND KORNREICH, PHILIPP G. *AN ELECTRO-OPTIC LENS FOR ADAPTIVE OPTICS AND IMAGE PROCESSING* (ECS-8205748); 12 MONTHS \$69,942

UNIVERSITY OF ROCHESTER

WAAG, ROBERT C. AND LIU, C. N. *NEW ULTRASOUND TISSUE PARAMETERS FOR IMPROVED IMAGING* (ECS-8017693 A01*); 12 MONTHS \$110,592

VOELCKER, HERBERT B. AND REQUICHA, ARISTIDES A. *RESEARCH ON GEOMETRIC MODELLING* (ECS-8104648 A01); 12 MONTHS \$154,505

MOORE, DUNCAN T. *GRADIENT INDEX OPTICAL SYSTEMS* (ECS-8106941); 12 MONTHS \$72,240

BARMISH, B. R. *STABILIZATION OF UNCERTAIN DYNAMICAL SYSTEMS* (ECS-8108804 A01); 12 MONTHS \$43,000

BOYD, ROBERT W. *NONLINEAR OPTICS OF IMPURITY-DOPED SOLIDS* (OPTICAL ENGINEERING) (ECS-8118121); 12 MONTHS \$44,501

HALL, DENNIS G. AND TEEGARDEN, KENNETH J. *SPECIALIZED RESEARCH EQUIPMENT: ION-BEAM SPUTTERING SYSTEM FOR RESEARCH IN OPTICS* (ECS-8203457); 12 MONTHS \$30,000

MORRIS, G. MICHAEL. *NEW ENGINEERING FACULTY RESEARCH INCENTIVE: SCENE MATCHING AT LOW LIGHT LEVELS* (ECS-820497); 12 MONTHS \$10,000

NORTH CAROLINA

NORTH CAROLINA STATE UNIVERSITY AT RALEIGH

DUNN, JOSEPH C. *THE BEHAVIOR OF ITERATIVE MINIMIZING SCHEMES NEAR SINGULAR AND NONSINGULAR OPTIMAL CONTROLS* (ECS-8005958 A02); 12 MONTHS \$27,835

DAVIS, ROBERT F. *ACQUISITION OF AN ION MICROSCOPE* (DMR-8107499 A01*); 12 MONTHS \$20,000

TRUSSELL, H. JOEL. *THE FEASIBLE SOLUTION IN SIGNAL PROCESSING* (ECS-8117499); 12 MONTHS \$35,050

LAIDIG, WYN D. *RESEARCH INITIATION: IMPURITY-INDUCED DISORDER OF QUANTUMWELL STRUCTURES* (ECS-8204932); 24 MONTHS \$47,958

STANCIU, DANIEL D. *RESEARCH INITIATION: INVESTIGATION OF MICROWAVE MAGNETOSTATIC WAVEGUIDES AND HIGH-Q RESONATORS BASED ON NONUNIFORMLY MAGNETIZED THIN FERRITE FILMS* (ECS-8204942); 24 MONTHS \$48,000

KHORRAM, SIAMAK, AND TRUSSELL, H. JOEL. *SPECIALIZED EQUIPMENT: EQUIPMENT FOR IMAGE PROCESSING AND REMOTE SENSING* (ECS-8207138); 12 MONTHS \$50,000

O'NEAL, J. B. *INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH CENTER FOR COMMUNICATIONS AND SIGNAL PROCESSING* (ISI-8212696*); 12 MONTHS \$5,000

OHIO

CASE WESTERN RESERVE UNIVERSITY

KAPOOR, VIKRAM J. *CHARGE-COUPLE DEVICES WITH SUBMICRON FEATURES* (ECS-8010880 A02); 12 MONTHS \$54,215

BROSILOW, COLEMAN B. *DEVELOPMENT AND ANALYSIS OF COORDINATION ALGORITHMS FOR THE SIMULATION OF INTEGRATED DYNAMIC SYSTEMS* (ECS-8110040*); 24 MONTHS \$46,014

COLLIN, ROBERT E. AND LANDO, JEROME B. *JOSEPHSON JUNCTION COMPUTING ELEMENTS* (ECS-8120565); 12 MONTHS \$35,000

OHIO STATE UNIVERSITY

BERME, N. KLEIN, C. A. AND KOZEKANANI, SAID H. *DYNAMICS AND CONTROL OF KINEMATICALLY REDUNDANT ROBOTIC AND BIOLOGICAL SYSTEMS* (ECS-8121519*); 12 MONTHS \$45,136

HEMAMI, HOOSHANG. *MODELLING, CONTROL, AND SIMULATION OF HUMAN MOVEMENT* (ECS-8201240); 12 MONTHS \$65,000

OZGUNER, UMIT. *DECENTRALIZED CONTROL WITH LOW ORDER, LOCAL MODELS* (SYSTEMS ENGINEERING) (ECS-8203877); 24 MONTHS \$33,000

UNIVERSITY OF CINCINNATI

BOYD, JOE T. AND NEVIN, JOSEPH H. *SPECIALIZED RESEARCH EQUIPMENT: ELECTRON BEAM EVAPORATION SYSTEM* (ECS-8014976 A01); 6 MONTHS \$10,000

KOSEL, PETER B. *RESEARCH INITIATION: CHARGE COUPLED DELAY LINE IN GALLIUM ARSENIDE USING OVERLAPPING CHARGE TRANSFER ELECTRODES WITH NARROW GAPS* (ECS-8205212); 24 MONTHS \$48,000

TAYLOR, FRED J. *HIGH-SPEED MEMORY INTENSIVE DIGITAL ARCHITECTURES* (ECS-8205833); 12 MONTHS \$60,745

UNIVERSITY OF TOLEDO

TAI, CHEN-YU. *LEVEL CROSSING AND TRANSIENT EFFECTS IN RESONANT HARMONIC GENERATION IN 12* (ECS-8109546 A01); 12 MONTHS \$39,448

OKLAHOMA

UNIVERSITY OF OKLAHOMA NORMAN CAMPUS

RAVINDRAN, ARUNACHAL A. *MULTI-ATTRIBUTE AND MULTIPLE CRITERIA APPROACHES FOR DETERMINING BAYESIAN ACCEPTANCE PLANS IN QUALITY CONTROL AND AUDITING* (ECS-8212076); 18 MONTHS \$25,994

OREGON

OREGON GRADUATE CENTER

BELL, ANTHONY E. AND SWANSON, LYNWOOD W. *MECHANISM OF LIQUID METAL ION SOURCE OPERATION* (ECS-8206796*); 5 MONTHS \$39,023

OREGON STATE UNIVERSITY

BHATTACHARYA, P. K. AND OWEN, S. J. T. *ELECTRICAL PROPERTIES OF ANNEALED AND IMPLANTED GALLIUM ARSENIDE* (ECS-8011917 A01); 12 MONTHS \$47,219

BHATTACHARYA, P. K. AND OWEN, S. J. T. *PHOTOLUMINESCENCE STUDIES OF IMPLANTED AND ANNEALED SEMICONDUCTORS* (ECS-8011917 A02); 12 MONTHS \$12,800

PENNSYLVANIA

CARNEGIE-MELLON UNIVERSITY-CARNEGIE INSTITUTE OF TECHNOLOGY

THOMAS, DONALD E. AND KRYDER, MARK H. *COMPUTER ARCHITECTURE AND MAGNETIC BUBBLE MEMORIES: AN INVESTIGATION OF SYSTEM AND TECHNOLOGY LEVEL DESIGN CONSIDERATIONS* (ECS-8017700 A01); 12 MONTHS \$107,055

PRESTON, KENDALL J. *REAL-TIME VLSI LOGICAL TRANSFORM IMAGE PROCESSORS* (ECS-8113530); 12 MONTHS \$70,279

DIRECTOR, S. W. *WORKSHOP ON THE IMPACT OF VERY LARGE SCALE INTEGRATION ON SIGNAL PROCESSING AND COMMUNICATIONS*, CARNEGIE-MELLON UNIVERSITY, AUGUST, 1982 (ECS-8209493); 12 MONTHS \$28,000

CARNEGIE-MELLON UNIVERSITY

KRYDER, MARK H. AND CHARP, STANLEY H. *INVESTIGATION OF CHARGED WALLS IN MAGNETIC BUBBLE DOMAIN DEVICES* (ECS-7912677 A02); 12 MONTHS \$110,000

SANDERSON, ARTHUR C. *DEVELOPMENT & IMPLEMENTATION OF SIGNAL PROCESSING ALGORITHMS ON A SYNCHRONOUS MULTIMICROPROCESSOR COMPUTER SYSTEMS* (ECS-7923893 A02); 12 MONTHS \$70,027

MILNES, ARTHUR G. *DEFECTS AND RECOMBINATION IN CADMIUM TELLURIDE* (ECS-8012890 A01*); 12 MONTHS \$27,881

CHANG, HSU, AND HUMPHREY, FLOYD B. *INTELLIGENT BUBBLE STORAGE FOR ROBOTS* (ECS-8016642 A01); 12 MONTHS \$139,731

KORTANEK, KENNETH O. *POLYEXTREMAL OPTIMIZATION IN ECONOMIC AND ENGINEERING SYSTEMS* (ECS-8026777 A01*); 12 MONTHS \$48,816

LEHOCZKY, JOHN P. *A NEW APPROACH TO THE EVALUATION AND OPTIMIZATION OF THE PERFORMANCE OF QUEUEING SYSTEMS* (ECS-8101576 A01*); 12 MONTHS \$25,000

CASASANT, DAVID. *PERFORMANCE AND SYSTEM OPTIMIZATION OF ACOUSTIC OPTIC SIGNAL PROCESSORS* (ECS-8114344); 12 MONTHS \$50,000

JONES, ANITA K. SEGALL, ZARY, AND SIEWIOREK, DANIEL P. *PRACTICAL EVALUATION OF MULTIPROCESSORS ACROSS A RANGE OF PROBLEMS* (ECS-8120270); 12 MONTHS \$134,430

BAHILL, A. T. *AN ADAPTIVE CONTROL MODEL FOR HUMAN TRACKING BEHAVIOR* (ECS-8121259); 12 MONTHS \$50,000

BISIANI, ROBERTO, AND REDDY, RAJ. *WORKSHOP ON COMPUTER ENGINEERING FOR ROBOTICS*, PITTSBURGH, PENNSYLVANIA: MARCH 1982 (ECS-8200226*); 6 MONTHS \$15,000

HUMPHREY, FLOYD B. AND THIELE, AL. *ALGEBRAIC MOBILITY THEORY* (ECS-8200744); 24 MONTHS \$107,094

KRYDER, MARK H. *DEEP U. V. MASK ALIGNER FOR INVESTIGATION OF MICROFABRICATION OF SUBMICRON GEOMETRY DEVICES* (ECS-8204423); 12 MONTHS \$60,000

DIRECTOR, S. W. *STATISTICAL DESIGN OF INTEGRATED CIRCUITS* (ECS-8203744); 12 MONTHS \$48,000

BALAS, EGON. *STRUCTURAL PROPERTIES OF COMBINATORIAL OPTIMIZATION PROBLEMS AND INTEGER PROGRAMMING* (OPERATIONS RESEARCH) (ECS-8205425*); 12 MONTHS \$23,052

DREXEL UNIVERSITY

NEWHOUSE, VERNON L. *TRANSCUTANEOUS MEASUREMENT OF DISTURBED BLOOD FLOW* (ECS-8200437); 12 MONTHS \$73,250

ONARAL, BANU. *RESEARCH INITIATION: LINEAR AND NONLINEAR SYSTEMS ANALYSIS OF METAL BIOELECTRODE POLARIZATION* (ECS-8204951); 24 MONTHS \$48,000

LEHIGH UNIVERSITY

DAHLKE, WALTER E. *TUNNELING IN MIS STRUCTURES* (ECS-8112537); 12 MONTHS \$65,000

WHITE, MARVIN H. *CHARGE TRANSPORT AND STORAGE IN MNOS MEMORY DEVICES* (ECS-8203096); 12 MONTHS \$55,000

WHITE, MARVIN H. AND BUTLER, SIDNEY R. *AUTOMATED DATA ACQUISITION AND FABRICATION EQUIPMENT FOR CUSTOM MICROELECTRONICS DEVICE RESEARCH* (ECS-8203545); 12 MONTHS \$62,000

PENNSYLVANIA STATE UNIVERSITY

GESELOWITZ, DAVID B. *SIMULATION STUDIES OF THE MAGNETO-CARDIOGRAM* (ECS-8018168 A01); 12 MONTHS \$51,926

VEDAM, KUPPUSWAMY Y. AND VIKRAM, C. S. *HOLOGRAPHIC ELLIPSO-METRY AND ITS APPLICATIONS* (ECS-8100487 A01); 12 MONTHS \$52,000

DAS, MUKUNDA B. *I/UCRA: AN EXPER. STUDY FOR THE CHARACTERIZATION OF DEFECTS AND IMPERFECTIONS IN GAAS FIELD-EFFECT TRANSISTORS WITH EMPH. ON THEIR ORIGIN IN MATERIALS AND PROCESSING* (ECS-8103737*); 24 MONTHS \$54,618

CUTLER, PAUL H. *AN EXPERIMENTAL AND THEORETICAL INVESTIGATION OF THE ION EMISSION MECHANISM IN LIQUID METAL ION SOURCES* (DMR-8108829*); 12 MONTHS \$10,000

SOCIETY FOR INDUSTRIAL AND APPLIED MATH (SIAM)

BLOCK, I. EDWARD. *CONFERENCE ON APPLIED LINEAR ALGEBRA: RALEIGH, NORTH CAROLINA: APRIL 26-29, 1982* (29S-8116849*); 3 MONTHS \$1,000

UNIVERSITY OF PENNSYLVANIA

ZEMEL, JAY N.; RESEARCH ON CHEMICALLY SENSITIVE DEVICE STRUCTURES (ECS-7924554 A02); 12 MONTHS \$57,997

KOROSTOFF, EDWARD, DAVIDOVITCH, Z. AND FARRINGTON, GREGORY C.; IDENTIFICATION OF THE RELEVANT PARAMETERS AND THEIR MAGNITUDES FOR ELECTRICAL STIMULATION OF BONE REMODELING (ECS-8006137 A02); 6 MONTHS \$59,286

POLLACK, SOLOMON R.; ELECTROKINETIC EFFECTS IN BONE (ECS-8017854 A01); 12 MONTHS \$66,873

LAUKS, IMANTS; INORGANIC RESISTS FOR ELECTRONIC DEVICE FABRICATION (ECS-8023767 A01); 12 MONTHS \$54,428

HERMAN, GABOR T.; METHODS FOR SOLVING LARGE AND SPARSE LINEARLY CONSTRAINED NONLINEAR OPTIMIZATION PROBLEMS WITH APPLICATIONS TO IMAGE RECONSTRUCTION (ECS-8117908); 24 MONTHS \$124,996

UNIVERSITY OF PENNSYLVANIA-WHARTON SCHOOL OF FINANCE AND COMMERCE

FISHER, MARSHALL L.; HEURISTICS AND LAGRANGIAN RELAXATIONS FOR COMBINATORIAL OPTIMIZATION PROBLEMS (OPERATIONS RESEARCH) (ECS-8205438); 24 MONTHS \$80,006

UNIVERSITY OF PITTSBURGH

CHAPARRO, LUIS F.; RESEARCH INITIATION: MODIFIED LEAST-SQUARES RATIONAL MODELLING OF 2-D DISCRETE SYSTEMS AND ITS APPLICATIONS TO IMAGE PROCESSING (ECS-8105988 A01); 12 MONTHS \$28,450

COON, DARRYL D.; DEVICE RELATED STUDIES OF LOCALIZED STATE CHARGE STORAGE AND FIELD IONIZATION IN SEMICONDUCTORS (ECS-820473); 12 MONTHS \$68,000

BOSTON, J ROBERT; SIGNAL ANALYSIS TECHNIQUES APPLIED TO AUDITORY BRAINSTEM RESPONSES (ECS-8203734); 12 MONTHS \$43,514

RHODE ISLAND

BROWN UNIVERSITY

KUSHNER, HAROLD J.; RESEARCH ON STOCHASTIC SYSTEMS AND STABILITY THEORY AND APPLICATIONS (ECS-7712946 A04*); 12 MONTHS \$32,652

WOLOVICH, WILLIAM A.; COLLABORATIVE RESEARCH IN AN INVESTIGATION OF THE RELATIONSHIP BETWEEN THE POLYNOMIAL MATRIX AND GEOMETRIC THEORIES OF LINEAR SYSTEMS (ECS-7916584 A01); 24 MONTHS \$68,730

NURMIKKO, ARTO V. AND MORSE, THEODORE F.; A WAVELENGTH TUNABLE ULTRASHORT PULSE FAR INFRARED LASER (ECS-8017519 A01); 12 MONTHS \$57,120

PEARSON, ALLAN E.; IDENTIFICATION OF NONLINEAR DIFFERENTIAL SYSTEMS (ECS-8111219 A01); 12 MONTHS \$40,500

SILVERMAN, HARVEY F.; PARALLEL ARCHITECTURES FOR SPEECH RECOGNITION (ECS-8113494); 12 MONTHS \$95,862

COOPER, DAVID B.; COMPUTER VISION ALGORITHMS WITHIN A GENERAL FRAMEWORK (ECS-8119676); 12 MONTHS \$80,000

FLEMING, WENDELL H.; RESEARCH ON OPTIMAL STOCHASTIC CONTROL AND RELATED TOPICS IN APPLIED PROBABILITY (MCS-8121940*); 12 MONTHS \$18,000

SILVERMAN, HARVEY F. AND BULTERMAN, DICK A.; LABORATORY FOR ENGINEERING MAN/MACHINE SYSTEMS (ECS-8202983); 12 MONTHS \$107,000

LAWANDY, NABIL M.; RESEARCH INITIATION: INFRARED LASER-DRIVEN DIFFUSION MEASUREMENT OF EFFECTS IN GASES (ECS-8203391); 24 MONTHS \$48,000

UNIVERSITY OF RHODE ISLAND

KELLEY, ROBERT E.; UNIVERSITY/INDUSTRY COOPERATIVE RESEARCH CENTER IN ROBOTICS (011-8203570*); 12 MONTHS \$15,000

SOUTH CAROLINA

TRAVEL AWARD

HOUSTIS, CATHERINE E.; TRAVEL TO ATTEND: INTERNATIONAL CONFERENCE ON COMPUTER COMMUNICATIONS; LONDON, ENGLAND; SEPTEMBER 7-10, 1982 (ECS-8216614); 6 MONTHS \$804

UNIVERSITY OF SOUTH CAROLINA AT COLUMBIA

KOBAYASHI, HIDEAKI; RESEARCH INITIATION: MULTINOMIAL ARITHMETIC FOR A HIGHSPEED ADAPTIVE LEARNING NETWORK ELEMENT (ECS-8204987); 24 MONTHS \$48,000

TENNESSEE

UNIVERSITY OF TENNESSEE AT KNOXVILLE

HALL, ERNEST L.; IMAGE RECOGNITION OF CURVED OBJECTS (ECS-8112074); 12 MONTHS \$46,732

VANDERBILT UNIVERSITY

SHIAYI, R G. AND BOURNE, JOHN R.; COMPUTERIZED LOCOMOTOR ELECTROMYOGRAPHY (ECS-8206447); 12 MONTHS \$79,877

TEXAS

NORTH TEXAS STATE UNIVERSITY

VAN STRYLAND, ERIC W, SOILEAU, M J, AND SMIRL, A L; NONLINEAR PHOTOACOUSTIC SPECTROSCOPY OF SOLIDS (ECS-8105513 A01); 12 MONTHS \$56,077

DIELS, JEAN-CLAU; INVESTIGATION OF NEW EXPERIMENTAL TECHNIQUES WITH SUBPICoseconds PULSES (ECS-8119568); 12 MONTHS \$66,350

RICE UNIVERSITY

BURRUS, CHARLES S. AND PARKS, THOMAS W.; EFFICIENT STRUCTURES FOR DIGITAL SIGNAL PROCESSING (ECS-8100453 A01); 12 MONTHS \$76,153

PEARSON, J B.; DESIGN OF MULTIVARIABLE CONTROL SYSTEMS (ECS-8102895 A01); 12 MONTHS \$52,071

TITTEL, FRANK K. AND WILSON, WILLIAM L.; TUNABLE DIATOMIC AND TRIATOMIC EXCIMER LASERS (ECS-8116646); 12 MONTHS \$56,500

TITTEL, FRANK K. AND WILSON, WILLIAM L.; TUNABLE COLOR CENTER LASERS FOR OPTICAL COMMUNICATION SYSTEMS (ECS-8204473); 12 MONTHS \$55,000

ABRAHAMS, JULIA; RESEARCH INITIATION: SECOND-ORDER CONDITIONALLY MARKOV GAUSSIAN PROCESSES AND THEIR LEVEL CROSSINGS (ECS-8204559); 12 MONTHS \$22,000

BRIGGS, FAYE A.; VLSI MULTIPROCESSOR ARCHITECTURE AND RELATIONAL DATABASE FOR ANALYSIS AND MANAGEMENT OF IMAGERY DATA (ECS-8212680); 12 MONTHS \$35,568

SOUTHERN METHODIST UNIVERSITY

MARTINEZ, ANDREW B.; NEW ENGINEERING FACULTY RESEARCH IN CENTIVE: DETECTION IN NON-GAUSSIAN, DEPENDENT NOISE (ECS-8206090); 12 MONTHS \$10,000

STEPHEN F AUSTIN STATE UNIVERSITY

PRICE, CAMILLE C.; THE ASSIGNMENT OF COMPUTATIONAL TASKS AMONG DISTRIBUTED PROCESSORS WITH LIMITED MEMORIES (ECS-8120875); 21 MONTHS \$37,374

TEXAS A & M UNIVERSITY

TSANG, LEUNG; MICROWAVE REMOTE SENSING OF EARTH TERRAIN (ECS-8014579 A01); 12 MONTHS \$42,000

BHATTACHARYYA, S P. AND HOWZE, J W.; SYNTHESIS OF ROBUST DISTURBANCE REJECTION CONTROLLERS FOR LINEAR MULTIVARIABLE SYSTEMS (ELECTRICAL ENGINEERING) (ECS-8200852); 12 MONTHS \$42,000

FELDMAN, DALE S.; RESEARCH INITIATION: FAILURE MODES IN SOFT TISSUE IMPLANTS (ECS-8204597); 24 MONTHS \$48,000

TEXAS TECH UNIVERSITY

EMRE, EROL; RESEARCH INITIATION: AN APPROACH TO ADAPTIVE CONTROL AND ADAPTIVE OBSERVERS FOR MULTIVARIABLE SYSTEMS (ECS-8204512); 24 MONTHS \$43,290

UNIV OF TEXAS AT AUSTIN

AGGARWAL, J K.; COMPUTATIONAL MODELS FOR PROCESSING SEQUENCES OF BIOENGINEERING IMAGES (ECS-8021511 A01); 12 MONTHS \$72,000

BENE, ROBERT W.; INVESTIGATION OF EXCESS (1/F) NOISE AND DIELECTRIC RESPONSE OF NON-CRYSTALLINE STRUCTURES PRECEDING FIRST NUCLEATION IN THIN FILM SYSTEMS (ECS-8111616); 12 MONTHS \$44,073

UNIV OF TEXAS AT DALLAS

COLLINS, CARL B. AND LEE, FRANCIS W.; INVESTIGATION OF THE FEASIBILITY OF THE ELECTRON BEAM EXCITED HIGH PRESSURE CHARGE TRANSFER LASER (ECS-8018730 A01); 12 MONTHS \$66,093

PANG, JONG-SHI; LARGE-SCALE AND GENERALIZED COMPLEMENTARY SYSTEMS (ECS-8114571 A01*); 12 MONTHS \$20,066

UNIVERSITY OF HOUSTON CENTRAL CAMPUS

NOORBEHESHT, BEHZAD; OPTO-ACOUSTIC IMAGING RESEARCH (ECS-7913259 A04); 12 MONTHS \$59,971

UTAH

UNIVERSITY OF UTAH

HOLLAAR, LFE A.; ASYNCHRONOUS CONTROL FOR VLSI CIRCUITS: METHODS FOR AUTOMATED DESIGN AND TESTING USING A DIRECT MAPPING TECHNIQUE (ECS-8116742); 24 MONTHS \$68,737

HENDERSON, THOMAS C.; SPECIALIZED RESEARCH EQUIPMENT: DIGITAL SIGNAL PROCESSING SYSTEM (VAX 11/750 - CLASS PROCESSOR) (ECS-8203901); 18 MONTHS \$30,000

VIRGINIA

DEPARTMENT OF DEFENSE-DEFENSE ADVANCED RESEARCH PROJECTS AGENCY

COOPER, ROBERT S.; NSF/DARPA AGREEMENT FOR USE OF DARPA VLSI IMPLEMENTATION SERVICE (ECS-8210243*); 12 MONTHS \$50,000

DOMUS DESIGN STUDIOS INC

PRATT, ROBERT; GRAPHIC ARTS SERVICES (PRM-8122156 A01); \$10,000

UNIVERSITY OF VIRGINIA

MATTAUCH, ROBERT J. AND OLIVER, J D.; OPTIMIZATION OF NOISE AND CUTOFF FREQUENCY OF SCHOTTKY BARRIER DIODES FOR USE AT SUBMILLIMETER FREQUENCY (ECS-8022937 A01); 12 MONTHS \$107,998

BATCHMAN, T E.; SUBMINIATURE IMPLANTABLE ELECTRIC FIELD PROBES (ECS-8103745 A01); 12 MONTHS \$50,648

KAZAKOS, DEMETRIOS; A NEW ALGORITHM FOR MAXIMUM LIKELIHOOD SEQUENCE ESTIMATION IN INTERSYMBOL INTERFERENCE (ECS-8105505 A01); 12 MONTHS \$35,007

VIRGINIA POLYTECHNIC INSTITUTE

SHERALI, HANIF D.; RESEARCH INITIATION: THE MIXED-INTEGERS LINEAR PROGRAMMING PROBLEM WITH EXTENSIONS TO ZERO-ONE QUADRATIC PROGRAMS (ECS-8103732 A01); 12 MONTHS \$24,709

BURNS, JOHN A. AND CLIFF, EUGENE M.; *COMPUTATIONAL METHODS FOR IDENTIFICATION AND OPTIMAL CONTROL OF HEREDITARY SYSTEMS* (ECS-8109245*); 12 MONTHS \$18,386
 INLEBETOUW, GUY; *SCANNING OPTICAL DATA PROCESSING WITH FEEDBACK* (ECS-8116437); 12 MONTHS \$42,618

WASHINGTON

UNIVERSITY OF WASHINGTON

MEDITCH, JAMES S.; *OPTIMIZATION AND CONTROL OF LARGE-SCALE NETWORKS* (ECS-8011262 A01*); 12 MONTHS \$39,992
 PIETRZYK, Z. A. AND VLASES, GEORGE C.; *INTERACTION OF STRONG ELECTROMAGNETIC WAVES WITH PLASMAS* (ECS-8012997 A01); 12 MONTHS \$92,935
 HUTCHINSON, THOMAS E.; *ELECTRON PROBE ANALYSIS* (PCM-8202439*); 24 MONTHS \$25,000

WASHINGTON STATE UNIVERSITY

KIM, CHUL E.; *RESEARCH ON COMPUTATIONAL DIGITAL GEOMETRY: EFFICIENT ALGORITHMS FOR SHAPE RECOGNITION* (ECS-8200068); 24 MONTHS \$65,533
 DESAI, UDAY B.; *RESEARCH INITIATION: A NEW MODEL REDUCTION APPROACH FOR STOCHASTIC SYSTEMS USING CANONICAL VARIABLES* (ECS-8204976); 12 MONTHS \$21,141

WISCONSIN

MEDICAL COLLEGE OF WISCONSIN

ACKMANN, JAMES J.; *STUDIES OF THE AC ELECTRICAL BEHAVIOR OF HETEROGENEOUS COMPOSITE BIOLOGICAL SYSTEMS* (ECS-7913183 A02); 12 MONTHS \$50,759

UNIVERSITY OF WISCONSIN-MADISON

SCHARER, JOHN E.; *ION CYCLOTRON HARMONIC AND NONLINEAR ELECTRON CYCLOTRON PLASMA WAVE STUDIES* (ECS-7920153 A02); 12 MONTHS \$41,140
 NORDMAN, JAMES E.; *JOSEPHSON TUNNEL JUNCTIONS USING HARD SUPERCONDUCTORS* (ECS-792050 A01); 12 MONTHS \$9,500
 EMMERT, GILBERT A.; *EXPERIMENTAL INVESTIGATION OF PLASMA INSTABILITIES* (ECS-8105482 A01); 12 MONTHS \$53,670
 SESHADRI, SOWRIRAJA N.; *ASYMPTOTIC THEORY OF SURFACE ACOUSTIC WAVE INTERACTIONS* (ECS-8106727); 12 MONTHS \$30,000
 TATARONIS, JOHN A.; *LOW FREQUENCY WAVE PROPAGATION STUDIES IN THREE-DIMENSIONAL GEOMETRY* (ECS-8110038 A01); 12 MONTHS \$41,000
 HERSHKOWITZ, NOAH, AND CHAN, CHUNG; *STUDY OF NONLINEAR WAVE PLASMA INTERACTION* (ECS-8203965); 12 MONTHS \$24,000
 SHOHEIT, J. L.; *MICROWAVE AND ELECTROMAGNETIC HEATING OF AND INTERACTIONS WITH PLASMAS IN LINEAR AND TOROIDAL GEOMETRY* (ECS-8206027); 12 MONTHS \$122,622
 NORDMAN, JAMES E.; *JOSEPHSON JUNCTIONS USING HARD SUPERCONDUCTORS* (ECS-8207499); 1 MONTHS \$23,850

UNIVERSITY OF WISCONSIN-MILWAUKEE

LEVY, MOISES; *INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: INVESTIGATION OF MAGNETIC FILMS FOR DEVELOPMENT OF VARIABLE AMPLITUDE AND FREQUENCY SAW FILTERS* (ECS-8001773 A02*); 12 MONTHS \$49,994
 BRANDT, WERNER W.; *BASIC STUDIES CONCERNING PLASMA ETCHING* (ECS-8010785 A01); 12 MONTHS \$42,995

CHEMICAL AND PROCESS ENGINEERING

ALABAMA

UNIVERSITY OF ALABAMA

APRIL, GARY C.; *CHEMICALS FROM WOOD BY ORGANIC SOLVENT DELIGNIFICATION* (CPE-8015591 A01); 12 MONTHS \$54,613

ARIZONA

ARIZONA STATE UNIVERSITY

BERMAN, NEIL S.; *TURBULENT MIXING IN HOMOGENEOUS AND NON-HOMOGENEOUS DILUTE POLYMER SOLUTIONS* (CPE-8022433 A01); 12 MONTHS \$39,401
 ZWIEBEL, IMRE; *RATES OF EQUILIBRIUM REACTIONS IN THE PRESENCE OF A SELECTIVE ADSORBENT* (CPE-8111288); 24 MONTHS \$98,128

UNIVERSITY OF ARIZONA

RANDOLPH, ALAN D.; *INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: EXPERIMENTAL AND THEORETICAL STUDIES OF PARTICLE-SIZE DISTRIBUTION IN CRYSTALLIZATION PROCESSES* (CPE-8117753*); 12 MONTHS \$32,498
 HOENIG, STUART A. AND TOLLIVER, DONALD J.; *INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: PARTICLE CONTAMINATION IN THE CLEAN ROOM* (CPE-8121174); 12 MONTHS \$44,559
 WANG, CHIANG; *RESEARCH INITIATION: DESIGN OF CLASSIFICATION RULES FROM A MAXIMUM RANK SUM STATISTIC AND APPLICATION TO FINE PARTICLE ANALYSIS* (CPE-8200302); 12 MONTHS \$17,958

ARKANSAS

UNIVERSITY OF ARKANSAS FAYETTEVILLE

BLYHOLDER, GEORGE; *ALKYL MIGRATION REACTION STEPS ON CATALYST SURFACES* (CPE-8105472 A01); 12 MONTHS \$47,546

CALIFORNIA

CALIFORNIA DEPARTMENT OF HEALTH SERVICES

JOHN, WALTER, AND GUILLORY, JOHN L.; *INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: PARTICLE - SURFACE INTERACTIONS* (CPE-8108426); 12 MONTHS \$49,225

CALIFORNIA INSTITUTE OF TECHNOLOGY

LEAL, I. GARY; *FLUID MECHANICS OF BUBBLES, DROPS, AND RIGID PARTICLES* (MEA-8003485 A02*); 12 MONTHS \$25,000
 BAILEY, JAMES E.; *STUDIES OF THE DYNAMICS OF INDIVIDUAL CELLS AND MICROBIAL POPULATIONS* (CPE-8011454 A02); 12 MONTHS \$52,504
 WEINBERG, W. HENRY; *INELASTIC ELECTRON TUNNELING SPECTROSCOPIC STUDIES OF METAL TETRAHYDROBORATES AND ORGANOMETALLIC POLYMERIZATION CATALYSIS* (CPE-8024597 A01); 12 MONTHS \$62,850
 BAILEY, JAMES E.; *PROCESS DYNAMIC MODELS FOR HETEROGENEOUS CATALYSTS* (CPE-8111607); 12 MONTHS \$85,180
 FLAGAN, RICHARD C.; *MECHANISMS OF ASH PARTICLE FORMATION* (CPE-8115751); 24 MONTHS \$107,446
 BAILEY, JAMES E.; *CHARACTERIZATION AND OPTIMIZATION OF PRODUCT EXPRESSION IN RECOMBINANT BACTERIA* (CPE-8118425); 12 MONTHS \$87,604
 STEPHANOPOULOS, GREGORY; *A STUDY ON THE STATE ESTIMATION AND CONTROL OF BIOCHEMICAL REACTORS* (CPE-8118877); 12 MONTHS \$55,004
 GAVALAS, GEORGE R. AND STEPHANOPOULOS, GREGORY; *SULFUR DIOXIDE REGENERATIVE ABSORPTION IN VANADIA-POTASSIA MELT* (CPE-8121892); 12 MONTHS \$77,754

SRI INTERNATIONAL

WISE, HENRY; *THERMODYNAMIC PROPERTIES AND CHEMICAL REACTIVITIES OF SURFACE CARBON SPECIES IN CATALYTIC HYDROCARBON SYNTHESIS* (CPE-8008803 A02); 12 MONTHS \$61,000
 CROSLY, DAVID R.; *RESEARCH IN LASER SPECTROSCOPY FOR COMBUSTION* (CPE-8017521 A01); 12 MONTHS \$89,936

STANFORD UNIVERSITY

SELF, SIDNEY A.; *DEVELOPMENT AND USE OF DIAGNOSTIC TECHNIQUES FOR COMBUSTION MHD AND RELATED PLASMA FLOWS* (CPE-8006973 A02); 12 MONTHS \$77,345
 MADIX, ROBERT J.; *THE EFFECTS OF SURFACE COMPOSITION AND STRUCTURE ON CHEMICAL REACTIONS ON METAL SURFACES* (CPE-8023815 A01); 12 MONTHS \$70,000
 FULLER, GERALD G.; *TWO COLOR BIREFRINGENCE MEASUREMENT OF FLOW INDUCED DEFORMATION AND ORIENTATION OF MACROMOLECULES* (CPE-8025833 A01); 12 MONTHS \$41,321
 EUSTIS, ROBERT H.; *INVESTIGATION OF INFLOW MAGNETOHYDRODYNAMIC DISK GENERATOR* (CPE-8107271); 12 MONTHS \$80,000
 ACRIVOS, ANDREAS; *INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: ENHANCED SEDIMENTATION IN SETTLING TANKS HAVING INCLINED WALLS* (CPE-8108200 A01*); 12 MONTHS \$54,000
 ACRIVOS, ANDREAS; *TRANSPORT PROCESSES IN TWO-PHASE MACROSCOPICALLY HOMOGENEOUS SYSTEMS* (CPE-8117299); 12 MONTHS \$50,230
 HANSON, RONALD K. AND KRUGER, CHARLES H.; *DEVELOPMENT OF TUNABLE LASER ABSORPTION AND FLUORESCENCE TECHNIQUES FOR SHOCK TUBE AND FLOW REACTOR STUDIES AND APPLICATIONS TO THE NO-NH3 SYSTEM* (CPE-8121989); 12 MONTHS \$80,000

UNIVERSITY OF CALIFORNIA, BERKELEY

SOONG, DAVID S.; *COMPUTER MODELLING OF RHEOLOGICAL BEHAVIOR OF ENTANGLED POLYMERS* (CPE-7826870 A03); 12 MONTHS \$46,780
 BLANCH, HARVEY W.; *BUBBLE SIZE AND FUNGAL MORPHOLOGY IN FERMENTATION SYSTEMS* (CPE-7912024 A02*); 12 MONTHS \$45,756
 KING, C. JUDSON; *FOOD-QUALITY FACTORS IN SPRAY DRYING* (CPE-8006786 A01); 12 MONTHS \$59,141
 GOREN, SIMON L. AND GUILLORY, JOHN L.; *INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: PARTICLE - SURFACE INTERACTIONS* (CPE-8103655); 12 MONTHS \$92,658
 FRAUSNITZ, JOHN M.; *VAPOR-LIQUID EQUILIBRIA OF HIGH TEMPERATURE MIXTURES OF HEAVY (POLAR) COMPONENTS FROM FOSSIL-FUEL SOURCES* (CPE-8107274); 12 MONTHS \$56,085
 EVANS, JAMES W.; *HYDRODYNAMICS EFFECTS IN ELECTROLYSIS CELLS WITH PARTICULAR REFERENCES TO ELECTROMETALLURGY* (CPE-8110659 A01); 12 MONTHS \$26,238
 OPPENHEIM, ANTONI K.; *STUDY OF JET IGNITION IN LEAN GAS MIXTURES* (CPE-8115163); 12 MONTHS \$80,000
 DAILY, JOHN W.; *EXPERIMENTAL INVESTIGATION OF TURBULENT COMBUSTION STABILIZED IN A FREE SHEAR LAYER* (CPE-8116841); 12 MONTHS \$78,254
 SASTRY, KALANADH V.; *INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: PROCESS ENGINEERING PRINCIPLES OF THE SELECTIVE FLOCCULATION OF FINE MINERAL SYSTEMS* (CPE-8120309); 12 MONTHS \$58,529
 HODGES, D. A. AND OLDFHAM, WILLIAM G.; *ACQUISITION OF SPECIALIZED EQUIPMENT FOR MICROFABRICATION RESEARCH* (ORS-8120447 A01*); \$1,400
 VERMEULEN, THEODORE; *A NEW METHOD FOR WATER SOFTENING AND DEALKALIZATION BY WEAK-ELECTROLYTE ION EXCHANGE* (CPE-8204377); 24 MONTHS \$160,743
 FUERSTENAU, DOUGLAS W.; *INTERFACIAL PHENOMENA IN MINERAL SEPARATION PROCESSES* (CPE-8204665); 12 MONTHS \$65,679

UNIVERSITY OF CALIFORNIA, DAVIS

BELL, RICHARD L; MIXING CHARACTERISTICS AND EFFICIENCY OF COMMERCIAL SCALE SIEVE ABSORPTION AND DISTILLATION TRAYS. (CHEMICAL ENGINEERING) (CPE-8116377); 12 MONTHS \$52,530

WHITAKER, STEPHEN; DRYING GRANULAR POROUS MEDIA (CPE-8116528); 24 MONTHS \$68,629

UNIVERSITY OF CALIFORNIA, IRVINE

SAMUELSEN, G S, AND LARUE, JOHN C; AN EXPERIMENTAL AND THEORETICAL INVESTIGATION OF TURBULENT, BACKMIXED, GAS-
EUS COMBUSTION (CPE-8013742 A01); 12 MONTHS \$77,032

UNIVERSITY OF CALIFORNIA, LOS ANGELES

FRIEDLANDER, SHELDON K, GIFFIN, CHARLES E, SINHA, MAHADEVA P, AND VILKER, VINCENT L; PARTICLE ANALYSIS BY MASS SPECTROMETRY (PAMS) (CPE-8008686 A01*); 12 MONTHS \$73,000

GHONIEM, NASR M; MICROSTRUCTURE EVOLUTION IN IRRADIATED STRUCTURE MATERIALS (CPE-8115571); 12 MONTHS \$47,897

POMRANING, G C; LINEAR TRANSPORT IN NON-HOMOGENEOUS MEDIA (CPE-8116450); 12 MONTHS \$51,500

FRIEDLANDER, SHELDON K; A STUDY OF THE BEHAVIOR OF CONSTANT RATE AEROSOL FLOW REACTORS (CPE-8117288); 12 MONTHS \$34,584

UNIVERSITY OF CALIFORNIA, SAN DIEGO

MILLER, DAVID R; KINETICS AND GAS DYNAMICS OF FREE-JET EXPANSIONS (CPE-8017871 A01); 12 MONTHS \$36,297

CHAU, PAO C; RESEARCH INITIATION: KINETIC STUDY HETEROGENEOUS PHASE TRANSFER CATALYSIS IN A NOVEL CYCLIC HOLLOW FIBER MONOLITH (CPE-8204211); 24 MONTHS \$48,000

UNIVERSITY OF CALIFORNIA, SANTA BARBARA

ODETTE, G ROBERT; THE EFFECTS OF CASCADE-INDUCED RANDOM FLUCTUATIONS ON IRRADIATION CREEP (CPE-8025300 A02); 12 MONTHS \$42,051

BANERJEE, SANJOY, AND LEACH, L P; INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: ONEDIMENSIONAL WAVE PHENOMENA IN TWO-PHASE FLOW (CPE-8112667); 12 MONTHS \$49,975

MELICHAMP, DUNCAN A, AND RINKER, ROBERT G; THE INFLUENCE OF MODELING ON THE DESIGN OF MULTIVARIABLE CONTROLLERS FOR DISTRIBUTED REACTOR SYSTEMS (CPE-8112668); 12 MONTHS \$60,238

SEBORG, DALE E; ADVANCED STRATEGIES FOR PROCESS CONTROL (CPE-8200274); 24 MONTHS \$12,223

COLORADO

COLORADO SCHOOL OF MINES

BUNGE, ANNETTE L; RESEARCH INITIATION: CHROMATOGRAPHY OF ADSORBING AND REACTING SPECIES IN SITU LEACHING PROCESSES (CPE-8205238); 24 MONTHS \$48,000

COLORADO STATE UNIVERSITY

COLLINS, GEORGE J; PLASMA DIAGNOSTICS OF SHEATH REGION OF GALLIUM ARSENIDE AND ASSOCIATED COMPOUNDS (CPE-8020633 A01); 12 MONTHS \$39,304

COLLINS, GEORGE J; ENGINEERING RESEARCH EQUIPMENT: LASER DIAGNOSTICS OF PLASMA ETCHING (CPE-8121134); 12 MONTHS \$20,000

TRAVEL AWARD

LINDEN, JAMES C; TRAVEL TO ATTEND GULBENKIAN INSTITUTE OF SCIENCE WORKSHOP ON EFFECTS OF ETHANOL AND OTHER MEMBRANE-ACTIVE DRUGS ON YEAST AND OTHER MICROORGANISMS; OETRAS, PORTUGAL; 8/30 - 9/10/82 (CPE-8216165); 6 MONTHS \$967

UNIVERSITY OF COLORADO AT BOULDER

BRANCH, MELVYN C; NITRIC OXIDE REDUCTION BY AMMONIA ADDITION TO POST FLAME GASES (CPE-8105300); 18 MONTHS \$52,669

KRANTZ, WILLIAM B, SANI, ROBERT L, AND LONSDALE, HAROLD K; INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: SKIN FORMATION IN ASYMMETRIC MEMBRANES (CPE-8121841*); 12 MONTHS \$63,725

CONNECTICUT

ADVANCED FUEL RESEARCH INC

SOLOMON, PETER R, AND HAMBLIN, DAVID G; CHARACTERIZATION OF BIOMASS AS A SOURCE OF CHEMICALS (CPE-8107453*); 12 MONTHS \$42,217

TRAVEL AWARD

HALLER, GARY L; TRAVEL TO ATTEND: JOINT CHINA-JAPAN-U.S. SYMPOSIUM ON HETEROGENEOUS CATALYSIS; DALIAN, LIAONING, CHINA; SEPTEMBER 1-4, 1982 (CPE-8216497); 6 MONTHS \$1,359

UNIVERSITY OF CONNECTICUT

COUGHLIN, ROBERT W; CONVERSION OF LIGNIN TO HIGH-VALUE CHEMICAL INTERMEDIATES (CPE-8014523 A01); 12 MONTHS \$102,739

BENNETT, CARROLL O; TRANSIENT STUDIES OF THE HYDROGEN/CARBON MONOXIDE REACTION OVER VARIOUS SUPPORTED TRANSITION METALS (CPE-8120499); 12 MONTHS \$64,963

CUTLIP, MICHAEL B, AND BENNETT, CARROLL O; SIMULTANEOUS KINETIC AND INFRARED MEASUREMENTS OF DYNAMIC SURFACE RATE PROCESSES (CPE-8210100); 12 MONTHS \$48,752

YALE UNIVERSITY

WEGENER, PETER P; EXPERIMENTAL AND THEORETICAL STUDY OF HOMOGENEOUS NUCLEATION OF SIMPLE VAPORS (CPE-7909683 A01); 12 MONTHS \$65,000

KRISHNAN, MAHADEVAN, AND HIRSHFIELD, JAY L; ELECTROMAGNETIC ISOTOPE SEPARATION IN PLASMAS (CPE-7916500 A03); 12 MONTHS \$65,157

NORDINE, PAUL C, AND ROSNER, DANIEL E; KINETICS OF HALOGEN GAS REACTIONS ON LIQUID AND SOLID SURFACES (CPE-8024190 A01); 12 MONTHS \$43,540

CHANG, RICHARD K, AND LEIF, ROBERT C; INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: SIZE, SHAPE, AND COMPOSITION CHARACTERIZATION OF DIELECTRIC PARTICULATES BY LIGHT SCATTERING (CPE-8112835*); 12 MONTHS \$30,000

HALPERN, BRET L; DETECTION OF VIBRATIONALLY EXCITED, SURFACE CATALYZED REACTION PRODUCTS BY INFRA-RED EMISSION (CPE-8114348*); 12 MONTHS \$49,624

HENRICH, VICTOR E; ENGINEERING RESEARCH EQUIPMENT: COMPUTER-INTERFACED QUADRUPOLE MASS SPECTROMETER FOR SURFACE ANALYSIS SYSTEM (CPE-8201864); 12 MONTHS \$9,000

DE LA MORA, JUAN F; RESEARCH INITIATION: UNIFIED APPROACH TO THE DYNAMICS OF PARTICULATE SUSPENSIONS AND OF GAS MIXTURES WITH DISPARATE MOLECULAR WEIGHTS (CPE-8205378); 24 MONTHS \$47,939

DELAWARE

UNIVERSITY OF DELAWARE

RUSSELL, THOMAS; DESIGN OF TWO-PHASE, GAS-LIQUID FERMENTORS (08E-7913226 A02*); 12 MONTHS \$31,574

SANDLER, STANLEY I; GENERALIZED CORRESPONDING STATES PRINCIPLE USING TWO NONSPHERICAL REFERENCE FLUIDS (CPE-8013756 A01); 12 MONTHS \$33,080

GATES, BRUCE C; INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: SUPPORTED METAL AND METAL CLUSTER CATALYSTS (CPE-8016212 A02*); 12 MONTHS \$60,996

DENSON, COSTEL D; THE FLOW OF POLYMER MELTS AND SOLUTIONS IN TWIN SCREW EXTRUDERS (CPE-8109997); 12 MONTHS \$63,760

PAULAITIS, MICHAEL E; INDUSTRY-UNIVERSITY COOPERATIVE RESEARCH ON THERMODYNAMIC SOLVENT EFFECTS ON DIELS-ALDER REACTIONS IN SUPERCRITICAL-FLUID SOLVENTS (CPE-8115030*); 12 MONTHS \$24,913

KLEIN, MICHAEL T; RESEARCH INITIATION: MODIFICATION OF LIGNIN THERMOLYSIS TOWARD OPTIMAL HYDROGEN UTILIZATION (CPE-8204440); 24 MONTHS \$48,000

DISTRICT OF COLUMBIA

AMERICAN CHEMICAL SOCIETY (ACS)

PAPOUTSAKIS, ELEFTHERI T, BLANCH, HARVEY W, AND STEPHANOPOULOS, GREGORY; ACS/IEC 1982 WINTER SYMPOSIUM: KINETICS AND THERMODYNAMICS IN BIOLOGICAL SYSTEMS HELD AT BOULDER, COLORADO (CPE-8200526); 12 MONTHS \$9,000

AMERICAN UNIVERSITY

WATERS, PAUL F, AND BREUER, MIKLOS M; INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: ADSORPTION OF POLYMER-SURFACTANT COMPLEXES ON SOLID SURFACES (CPE-8010687 A01*); \$4,750

NATIONAL ACADEMY OF SCIENCES-NATIONAL RESEARCH COUNCIL

STEVEY, H G, AND HADDAD, TERRIER A; PERFORM A STUDY OF EDUCATION AND UTILIZATION OF THE ENGINEER 1980-2000: STATUS, NEEDS, AND OPPORTUNITIES, PHASE TWO (ENG-8212257*); 12 MONTHS \$132,440

SMITHSONIAN INSTITUTION

FORMAN, PAUL; PARTICIPANT SUPPORT FOR 1982, PRECISION TIME AND TIME INTERVAL (PTTI) MEETING, WASHINGTON, D.C. NOVEMBER 30 DECEMBER 2, 1982 (08S-8219083*); 12 MONTHS \$4,296

FLORIDA

UNIVERSITY OF FLORIDA-ENGINEERING & INDUSTRIAL EXPERIMENT STATION

O'CONNELL, JOHN P; FURTHER APPLICATION OF STATISTICAL MECHANICS TO THERMODYNAMIC PROPERTIES OF LIQUID SOLUTIONS (CPE-8007395 A01); 12 MONTHS \$52,191

O'CONNELL, JOHN P; THIRD INTERNATIONAL CONFERENCE ON PHASE EQUILIBRIA AND FLUID PROPERTIES FOR CHEMICAL PROCESS DESIGN TO BE HELD IN CALLAWAY GARDENS, GEORGIA IN APRIL 1983 (CPE-8209738); 12 MONTHS \$15,000

SHAH, DINESH O; TRAVEL TO ATTEND: WORKSHOP ON BIOLOGICAL AND TECH. REVELANCE OF REVERSED MICELLES AND OTHER AMPHIPHILIC STRUCTURES IN APOLAR MEDIA: RIGI-KALTBAD, SWITZERLAND 8/29-10/1 (CPE-8217299); 6 MONTHS \$900

UNIVERSITY OF FLORIDA

LEE, HONG H; MODELING AND OPTIMIZATION OF A FIXED-BED REACTOR UNDER THE CONDITIONS OF CATALYST SINTERING (CPE-8104713 A01); 12 MONTHS \$41,301

WESTERMAN-CLARK, GERALD B; RESEARCH INITIATION: ELECTROKINETIC EFFECTS IN CHARGED POROUS MEMBRANES, THEORY AND EXPERIMENTS (CPE-8205076); 24 MONTHS \$47,998

UNIVERSITY OF MIAMI

MITSUMI, AKIRA; PHOTOPRODUCTION OF HYDROGEN BY MARINE BLUE-GREEN ALGAE (CPE-8018142 A02); 12 MONTHS \$89,225

VEZIROGLU, T NEJAT; MULTI-PHASE FLOW AND HEAT TRANSFER SYMPOSIUM - WORKSHOP, APRIL 18-20, 1983 - MIAMI, FLORIDA (MEA-8207453*); 19 MONTHS \$3,500

GEORGIA

GEORGIA INSTITUTE OF TECHNOLOGY MAIN CAMPUS

TEJA, AMYN S. COLLABORATIVE RESEARCH: GENERALIZED CORRELATING STATES PRINCIPLE USING TWO NON-SPHERICAL REFERENCE FLUIDS (CPE-8104201 A01); 12 MONTHS \$32,725
SKELLAND, ANTHONY H. DISPERSION AND MASS TRANSFER IN AGITATED LIQUID-LIQUID SYSTEMS (CPE-8208872); 24 MONTHS \$125,672

IDAHO

UNIVERSITY OF IDAHO

KORUS, ROGER A. MASS TRANSFER EFFECTS WITH HIGHLY FLOCCULATING YEAST (CPE-8104709); 24 MONTHS \$74,757
KORUS, ROGER A. SPECIALIZED ENGINEERING RESEARCH EQUIPMENT: CONTINUOUS FERMENTATION RESEARCH EQUIPMENT (CPE-8201442); 12 MONTHS \$20,000
STEWART, RICHARD B. AND JACOBSEN, RICHARD T. TRAVEL GRANT: THIRD INTERNATIONAL WORKSHOP ON EQUATION OF STATE, LONDON, U.K.; JULY 28-AUGUST 3, 1982 (CPE-8209803); 6 MONTHS \$1,875

ILLINOIS

ILLINOIS INSTITUTE OF TECHNOLOGY

GIDASPOW, D. AND WASAN, DARSH T. SEPARATION OF PARTICLES FROM NON-AQUEOUS MEDIA BASED ON ELECTROKINETIC PHENOMENA (CPE-7919189 A02); 12 MONTHS \$57,916
WASAN, DARSH T. DYNAMIC EFFECTS OF SURFACTANTS ON INTERFACIAL VISCOELASTIC PROPERTIES (CPE-8023181 A01); 12 MONTHS \$61,000
BERNSTEIN, BARRY, AND MALKUS, DAVID S. STEADY FLOWS OF MEMORY FLUIDS WITH FINITE ELEMENTS (MCS-8102089 A01*); 12 MONTHS \$12,920
GIDASPOW, DIMITRI. HYDRODYNAMICS OF FLUIDIZATION (CPE-8209290); 12 MONTHS \$47,000

NORTHWESTERN UNIVERSITY

THODOS, GEORGE. VAPOR-LIQUID EQUILIBRIUM MEASUREMENTS: POLAR-NONPOLAR BINARY AND TERNARY MIXTURES AT ELEVATED PRESSURES AND TEMPERATURES (CPE-7920431 A01); 12 MONTHS \$55,466
GRAESSLEY, WILLIAM W. FLOW PROPERTIES OF POLYMERS (CPE-8000630 A02); 3 MONTHS \$21,159
MAH, RICHARD S. DEVELOPMENT OF COMPUTING AIDS AND TECHNIQUES FOR PROCESS ANALYSIS (CPE-8115161); 12 MONTHS \$60,480
MAH, RICHARD S. ENHANCEMENT OF THERMAL EFFICIENCY IN DISTILLATION (CHEMICAL ENGINEERING) (CPE-8120564); 12 MONTHS \$46,138
LEWIS, ELMER E. COMPUTATIONAL METHODS BASED ON THE EVEN PARITY FORM OF THE NEUTRON TRANSPORT EQUATION (CPE-8203402); 12 MONTHS \$32,648

UNIVERSITY OF ILLINOIS AT CHICAGO CIRCLE

MCNALLAN, MICHAEL. REFINING OF LIQUID METALS BY INJECTION OF GAS PARTICLE JETS (CPE-8115342); 12 MONTHS \$37,714
KIEFER, JOHN H. ENGINEERING RESEARCH EQUIPMENT: A LASER SYSTEM FOR KINETIC STUDIES IN COMBUSTION (CPE-8115811); 12 MONTHS \$20,000
DANDEKAR, KARTIK V. RESEARCH INITIATION: DESIGN OF A COMBUSTOR FOR PREMIXED TURBULENT FLAME STUDY (CPE-8205225); 24 MONTHS \$47,495

UNIVERSITY OF ILLINOIS AT URBANA

HANRATTY, THOMAS J. MASS TRANSFER AND TWO-PHASE FLOW (CPE-7920980 A01); 12 MONTHS \$78,000
ALKIRE, RICHARD C. POROUS ELECTRODES, SHAPE CHANGE, AND OPTIMIZATION (CPE-8008947 A01); 12 MONTHS \$58,553
CHAO, BEI T. AND SOO, SHAO L. MODELING ELECTROSTATIC EFFECTS IN DILUTE SOLID-GAS SUSPENSION SYSTEMS (CPE-8011270 A02*); 12 MONTHS \$54,193
CHILTON, ARTHUR B. DEPOSITION OF ENERGY IN TISSUE SPHERE FROM NEUTRON BEAMS (CPE-8110045); 21 MONTHS \$47,677
PETERS, JAMES E. RESEARCH INITIATION: PULSED SPRAY DROP SIZING (CPE-8204437); 24 MONTHS \$48,000
LARSON, RICHARD S. RESEARCH INITIATION: INTERFACIAL MASS-TRANSFER RESISTANCE IN NONIDEAL SYSTEMS (CPE-8204744); 24 MONTHS \$48,000

INDIANA

PURDUE UNIVERSITY

JIM, HENRY C. OPERATION OF FED BATCH AND CONTINUOUS CULTURES FOR OPTIMAL PRODUCT FORMATION USING COMPUTER COUPLED FERMENTERS (CPE-7918902 A02); 12 MONTHS \$48,049
REKLAITIS, GINTARAS V. AND OKOS, M. R. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: COMPUTER AIDED DESIGN & ANALYSIS OF MULTIPRODUCT BATCH/SEMICONTINUOUS PROCESSES (CPE-7924565 A02*); 12 MONTHS \$66,989
RAMKRISHNA, DORAIWAM, AND NARSIMHAN, GANESAN. ANALYSIS OF RATE PROCESSES IN LIQUID-LIQUID DISPERSIONS (CPE-8001749 A02); 3 MONTHS \$3,997
TSAO, GEORGE T. CONVERSION OF CELLULOSE AND XYLAN INTO GLYCOLS (CPE-8022426 A01); 12 MONTHS \$94,345
FRIEDLAENDER, FRITZ J. WANKAT, PHILLIP C. AND PETRAKIS, LEON. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: HIGH GRADIENT MAGNETIC SEPARATION (CPE-8023184 A01*); 12 MONTHS \$52,836
LADISCH, MICHAEL R. AND GONG, CHENG-SHU. MODELING OF CELLULOSE HYDROLYSIS BY PURE AND MIXED COMPONENT CELLULASES (CPE-8115356); 12 MONTHS \$58,619

ALBRIGHT, LYLE F. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH: TWO-STEP ALKYLATION OF ISOBUTANE WITH LIGHT OLEFINS (CPE-8120067*); 12 MONTHS \$55,000
DELAGASS, W. N. KINETICS AND CATALYTIC CHEMISTRY OF HYDRO-CARBON SYNTHESIS OVER CATALYSTS CONTAINING IRON AND RHO-DIUM (CPE-8212221); 12 MONTHS \$70,004

UNIVERSITY OF NOTRE DAME

STRIEDER, WILLIAM. TRANSPORT IN HETEROGENEOUS AND POROUS MEDIA: THERMAL CONDUCTION, SURFACE DIFFUSION, AND GASEOUS DIFFUSION WITHIN FINE PORES (CPE-7919790 A02); 12 MONTHS \$43,525
SCHMITZ, ROGER A. THERMOGRAPHIC STUDIES OF CATALYTIC REACTION DYNAMICS (CPE-8110675 A01); 14 MONTHS \$82,612
WOLF, EDUARDO E. PHOTOCATALYTIC DECOMPOSITION OF WATER BY VISIBLE LIGHT (CPE-8204096); 24 MONTHS \$72,000
MCHUGH, MARK A. RESEARCH INITIATION: AN EXPERIMENTAL INVESTIGATION OF THE HIGH PRESSURE FLUID PHASE BEHAVIOR OF SOLID POLYMERS/SUPERCRITICAL SOLVENT MIXTURES (CPE-8204738); 24 MONTHS \$48,000

IOWA

IOWA STATE UNIVERSITY OF SCIENCE & TECHNOLOGY

REILLY, PETER J. KINETICS AND SPECIFICITY PATTERNS OF XYLANASES (CPE-8022895 A01); 12 MONTHS \$60,500
REILLY, PETER J. KINETICS OF GLUCOAMYLASE-CATALYZED TRANSFER REACTIONS (CPE-8101102); 24 MONTHS \$34,590
LARSON, MAURICE A. CHARACTERIZATION OF SECONDARY NUCLEATION BY ANALYSIS OF A GROWING CRYSTAL SURFACE WITH RAMAN SPECTROSCOPY (CPE-8111685 A01); 12 MONTHS \$45,995
GLATZ, CHARLES E. AND REILLY, PETER J. ISOELECTRIC PRECIPITATION KINETICS OF PROTEIN (CPE-8120568*); 12 MONTHS \$28,000
SCHRADER, GLENN L. LARSON, MAURICE A. BERGLUND, KRIS A. AND WHELOCK, T. D. ENGINEERING RESEARCH EQUIPMENT: COMPUTER DATA SYSTEM FOR LASER RAMAN SPECTROSCOPY (CPE-8202714); 12 MONTHS \$30,000
BERGLUND, KRIS A. RESEARCH INITIATION: CHARACTERIZATION OF CONTACT NUCLEATION USING A LASER RAMAN MICROPROBE (CPE-8204977); 24 MONTHS \$47,895

UNIVERSITY OF IOWA

BEDDOW, JOHN K. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: MORPHOLOGICAL ANALYSIS (CPE-8023868 A01); 12 MONTHS \$68,000

KANSAS

KANSAS STATE UNIVERSITY

LESTER, THOMAS W. ANALYTICAL INSTRUMENTATION FOR COMBUSTION RESEARCH (CPE-8104749); 12 MONTHS \$23,200
ERICKSON, LARRY E. AND GLASGOW, LARRY A. SYNTHESIS OF OPTIMAL TOWER FERMENTORS FOR VISCOUS FERMENTATIONS (CPE-8108799); 12 MONTHS \$40,813
GLASGOW, LARRY A. PHYSICO-CHEMICAL EFFECTS UPON THE PARTICLE SIZE DISTRIBUTION IN COAGULATION (CPE-8112533); 24 MONTHS \$35,703
ERICKSON, LARRY E. AND YANG, SHIE-SHIE. IMPROVED ESTIMATION OF PRODUCT YIELDS FROM MICROBIAL PROCESSES USING MASS AND ENERGY BALANCE REGULARITIES (CPE-8120039); 12 MONTHS \$27,783

UNIVERSITY OF KANSAS MAIN CAMPUS

MILAVICKAS, LOUIS R. RESEARCH INITIATION: FUSION-TYPE NEUTRON KERMA IN TISSUE EQUIVALENT PLASTIC, CARBON, MAGNESIUM, AND IRON (CPE-8121484); 24 MONTHS \$47,995

KENTUCKY

UNIVERSITY OF KENTUCKY

ROCO, M. C. RESEARCH INITIATION: CALCULATION MODEL FOR MULTI-SPECIES PARTICLE SLURRY FLOW (CPE-8205217); 24 MONTHS \$48,000

LOUISIANA

LOUISIANA STATE UNIVERSITY, BATON ROUGE

MCLAUGHLIN, EDWARD. THE SOLUBILITY OF PURE GASES AND GAS MIXTURES IN LIQUIDS AT PRESSURES UP TO 30,000 PSIA (CPE-8111287); 12 MONTHS \$53,202

MAINE

UNIVERSITY OF MAINE, ORONO

SHELDEN, RONALD A. AND THOMPSON, EDWARD V. DEPENDENCE OF DIFFUSIVE PERMEATION RATES ON UPSTREAM AND DOWNSTREAM PRESSURES (CPE-8105813 A01); 12 MONTHS \$60,778
THOMPSON, EDWARD V. AND CECKLER, WILLIAM H. INFLUENCE OF MOLECULAR WEIGHT, MOLECULAR WEIGHT DISTRIBUTION, & BRANCHING ON THERMAL CONDUCTIVITY & THERMAL DIFFUSIVITY OF POLYSTYRENE MELTS & OTHER POLYMER SYSTEMS (CPE-8122053); 12 MONTHS \$65,593
PENDSE, HEMANT. RESEARCH INITIATION: PHYSICO-CHEMICAL FACTORS IN PARTICLE DEPOSITION WITHIN PAPER (CPE-8204936); 24 MONTHS \$47,976

MARYLAND

CAPITAL SYSTEMS GROUP INC

CLANSKY, KENNETH B; SUPPORT SERVICES FOR RESEARCH INFORMATION PROCESSING DISSEMINATION PROGRAMS (08G-8020049 A02*); 12 MONTHS \$32,000

JOHNS HOPKINS UNIVERSITY

KATZ, JOSEPH L; PHOTOINDUCED NUCLEATION (CPE-8116653); 12 MONTHS \$39,485

PRENTICE, GEOFFREY A; RESEARCH INITIATION: PASSIVATION INHIBITION CAUSED BY SILICATE ADDITION IN THE ZINC/ALKALINE ELECTROLYTE SYSTEM (CPE-8202725); 24 MONTHS \$48,000

UNIVERSITY OF MARYLAND, COLLEGE PARK

GENTRY, JAMES W; THE EFFICIENCY OF COLLECTING NON-SYMMETRICAL PARTICLES (CPE-8011269 A02); 12 MONTHS \$51,852

HATCH, RANDOLPH T, CADMAN, THEODORE W, AND COOK, THOMAS M; INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: DEVELOPMENT OF CONTINUOUS, MIXED CULTURE PROCESSES (CPE-8016547 A01*); 12 MONTHS \$20,000

MCVAVY, THOMAS J; INTERACTION ANALYSIS WITH APPLICATION TO DISTILLATION (CPE-8025301 A01); 12 MONTHS \$59,864

MCILRATH, THOMAS J; GENERATION OF COHERENT RADIATION BY NON-LINEAR MIXING IN GASES (CPE-8119250); 12 MONTHS \$61,275

MASSACHUSETTS

BOSTON COLLEGE

DAVIDOVITS, PAUL; EXOERGIC GAS PHASE REACTIONS OF BORON AND CARBON ATOMS (CPE-8007185 A02); 12 MONTHS \$57,394

CASTLE TECHNOLOGY CORPORATION

PEMSLER, J PAUL; IRON AS A REDUCTANT IN AMMONIACAL SOLUTIONS (CPE-8111229*); 12 MONTHS \$44,683

HARVARD UNIVERSITY

PICKARD, DAVID K; SEDIMENTATION: DATA ANALYSIS, QUANTITATIVE THEORY, AND SIMULATION (CPE-8117673); 12 MONTHS \$31,085

HARVARD UNIVERSITY-SCHOOL OF PUBLIC HEALTH

LEITH, DAVID; RELATIONSHIPS BETWEEN CYCLONE PERFORMANCE AND DIMENSIONS (CPE-8012968 A01); 12 MONTHS \$34,025

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

SATTERFIELD, CHARLES N; INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: EFFECT OF BULK LIQUID VS. GAS PHASE ON SELECTIVITY IN THE FISCHER-TROPSCH SYNTHESIS (CPE-7914173 A02*); 12 MONTHS \$29,200

GRODZINSKY, ALAN J; ELECTRIC FIELD CONTROL OF PERMEABILITY AND INTERACTIONS OF CONNECTIVE TISSUE POLYELECTROLYTES (CPE-7918781 A02); 12 MONTHS \$68,914

HOWARD, JACK B, AND SIGLA, DONALD C; INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: SOOT FORMATION AND BURNOUT IN FLAMES (CPE-8008071 A01*); 12 MONTHS \$22,495

VAYENAS, COSTAS G; SOLID-ELECTROLYTE AIDED STUDY OF CATALYTIC AND ELECTROCATALYTIC OXIDATIONS (CPE-8009436 A01); 12 MONTHS \$83,320

BADDOUR, RAYMOND F, AND COHEN, ROBERT E; CHEMICAL REACTIONS OF POLYMERIC MATERIALS IN DILUTE FLUORINE PLASMAS (CPE-8025302 A01); 12 MONTHS \$85,000

GATOS, HARRY C, AND LAGOWSKI, JACEK; STUDIES OF ADSORPTION AND CHARGE TRANSFER ON SEMICONDUCTOR SURFACES - APPLICATION TO CATALYSIS (CPE-8026506 A01); 12 MONTHS \$71,950

LOUIS, JEAN F; NONUNIFORMITIES STUDIES IN MHD FLOWS (CPE-8102902); 12 MONTHS \$79,660

KAREL, MARCUS; PREDICTION, SIMULATION AND OPTIMIZATION OF NUTRIENT CONTENT OF PROCESSED FOODS (CPE-8104582); 12 MONTHS \$81,900

REID, ROBERT C; SUPERCRITICAL FLUID EXTRACTION (CPE-8110019*); 12 MONTHS \$93,155

DEEN, WILLIAM M; RESTRICTED TRANSPORT OF SOLUTES IN FINE PORES (CPE-8111279); 12 MONTHS \$58,725

ARMSTRONG, ROBERT C, AND BROWN, ROBERT A; EXPERIMENTAL AND COMPUTATIONAL STUDIES OF VISCOELASTIC FLOWS (CPE-8112944); 12 MONTHS \$71,500

MAXWELL, EMANUEL, AND PRICE, C R; INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: SCALING CONCEPT FOR HIGH GRADIENT MAGNETIC SEPARATION (CPE-8115218); 12 MONTHS \$60,000

SADOWAY, DONALD R; HIGH PURITY MANGANESE BY FUSED CHLORIDE ELECTROLYSIS (CPE-8116641); 12 MONTHS \$54,403

KELLAND, DAVID R; SELECTIVE MAGNETIC MINERAL COMPONENT SEPARATION (CPE-8120445); 12 MONTHS \$60,000

DEMAIN, ARNOLD L, AND MAISCH, WELDON F; INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: UPGRADING OF CELLULOSE WASTES INCLUDING INDUSTRIAL FIBERS BY CLOSTRIDIUM THERMOCCELLUM (CPE-8202655*); 12 MONTHS \$45,000

ELLIOTT, JOHN F; THERMODYNAMIC PROPERTIES OF LIQUID SILICATES, MATES AND SALTS (CPE-8204026); 12 MONTHS \$65,000

SINSKEY, ANTHONY J; PUBLISHING OF MIT 10TH ANNUAL SEA GRANT LECTURE - BIOTECHNOLOGY AND GENETIC ENGINEERING IN THE MARINE SCIENCE (CPE-8210818*); 12 MONTHS \$1,500

TRAVEL AWARD

SHELDON, ERIC; TRAVEL TO ATTEND TWO INTERNATIONAL CONFERENCES ON NEUTRON SCIENCE AND TECHNOLOGY; ANTWERP, BELGIUM; AND CAMBRIDGE, ENGLAND; SEPTEMBER 1982 (CPE-8207973); 6 MONTHS \$1,520

UNIVERSITY OF MASSACHUSETTS, AMHERST

HULTIN, HERBERT O; STUDY OF A PROTEOLYTIC ENZYME FROM POIKILOTHERMIC ORGANISMS (CPE-7910816 A02); 12 MONTHS \$27,597

DOUGLAS, JAMES M; PROCESS DESIGN WITH CATALYST DEACTIVATION (CPE-7918041 A02); 12 MONTHS \$37,825

DOUGLAS, JAMES M, AND DOHERTY, MICHAEL F; INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: A NEW APPROACH TO THE PRELIMINARY SYNTHESIS OF CONTROL SYSTEMS FOR COMPLETE CHEMICAL PLANTS (CPE-8105500); 12 MONTHS \$57,231

NG, K M; DESIGN OF POROUS COALESCERS FOR BREAKDOWN OF EMULSIONS (CPE-8112824); 12 MONTHS \$50,678

OTTINO, JULIO M; CONTINUOUS MIXING SYSTEMS AS CHEMICAL REACTORS FOR POLYMER PROCESSING (CPE-8117732*); 12 MONTHS \$35,027

DOUGLAS, JAMES M, AND WEI, JAMES; INTERNATIONAL SYMPOSIUM OF CHEMICAL REACTIONS ENGINEERING; OCTOBER 4-6, 1982; BOSTON, MASSACHUSETTS (CPE-8120647); 12 MONTHS \$14,500

CONNER, WILLIAMS C, AND HAENSEL, VLADIMIR; THE EFFECT OF MORPHOLOGY ON THE RATE OF SURFACE DIFFUSION ACROSS TRANSITION METAL OXIDES (CPE-8121800); 24 MONTHS \$20,282

WINTER, H HENNING; SPECIALIZED ENGINEERING RESEARCH EQUIPMENT: EQUIPMENT FOR MEASURING MATERIAL FUNCTIONS OF LINEAR AND FINITE VISCOELASTICITY (CPE-8203273); 12 MONTHS \$45,000

WORCESTER POLYTECHNIC INSTITUTE

MOSER, WILLIAM R; ENGINEERING RESEARCH EQUIPMENT: FOURIER-TRANSFORM INFRARED SPECTROMETER (CPE-8203278); 12 MONTHS \$50,900

ROLLINGS, JAMES E; RESEARCH INITIATION: DYNAMICS OF BIOPOLYMER DEGRADATION IN SOLUBLE AND IMMOBILIZED ENZYME REACTOR SYSTEMS (CPE-8204966); 24 MONTHS \$48,000

DIBIASIO, DAVID; BIOCHEMICAL ENGINEERING LABORATORY COMPUTER (CPE-8212077); 12 MONTHS \$34,450

MICHIGAN

MICHIGAN STATE UNIVERSITY

PETTY, CHARLES A; INDUSTRY/UNIVERSITY COOPERATIVE ACTIVITY: THE EFFECT OF POLYMER ADDITIVES ON HYDROCYCLONE PERFORMANCE (CPE-8015537 A01*); 9 MONTHS \$16,335

WILKINSON, BRUCE W; FUNDAMENTAL STUDY OF ELECTRIC FIELD EFFECTS IN GAS-SOLID ADSORPTION (CPE-8111276); 24 MONTHS \$64,593

BUXBAUM, ROBERT E; RESEARCH INITIATION: ZIRCONIUM-PALLADIUM PERMEATION FOR THE SEPARATION OF HYDROGEN ISOTOPES FROM THE LIQUID LITHIUM (CPE-8205021); 24 MONTHS \$47,952

UNIVERSITY OF MICHIGAN-ANN ARBOR

DONAHUE, FRANCIS M; KINETICS OF ELECTROLESS COPPER PLATING (CPE-7909745 A02); 12 MONTHS \$41,774

NICHOLLS, JAMES A, SICHEL, MARTIN, AND KAUFFMAN, CHARLES W; DETONATIVE COMBUSTION OF COAL, GRAIN AND OTHER DUSTS (CPE-8023865 A01); 12 MONTHS \$88,000

GULARI, ERDOGAN; SPECTROSCOPIC INVESTIGATIONS OF STRUCTURE, TRANSPORT AND THERMODYNAMIC PROPERTIES OF NONIDEAL LIQUID SOLUTIONS (CPE-8107724); 12 MONTHS \$65,000

WADA, HARUE, AND PEHLKE, ROBERT D; NEW REFINING PROCESS FOR MOLTEN IRON AND IRON ALLOYS-SODA-ASH TREATMENT COMBINED WITH SLAGLESS BOP BLOWING (CPE-8117084); 12 MONTHS \$52,672

SCHWANK, JOHANNES; BIMETALLIC CATALYSTS: MODIFICATION OF ACTIVITY AND SELECTIVITY BY SUPPORT INTERACTIONS (CPE-8212473); 12 MONTHS \$59,722

WAYNE STATE UNIVERSITY

ROTHER, ERHARD W; LASER PHOTOCHEMISTRY AND DIAGNOSTICS WITH ALIGNED MOLECULES (CPE-8106325); 12 MONTHS \$80,000

MINNESOTA

UNIVERSITY OF MINNESOTA-INSTITUTE OF TECHNOLOGY

PFFENDER, EMIL, AND HUANG, T T; BASIC STUDIES ASSOCIATED WITH THERMAL PLASMA PROCESSING (CPE-8200628); 12 MONTHS \$75,011

UNIVERSITY OF MINNESOTA

TIRRELL, MATTHEW V; COPOLYMERIZATION REACTION ENGINEERING AT HIGH CONVERSION (CPE-7925356 A02); \$38,865

PFFENDER, EMIL; STUDIES OF THE ELECTRODE REGIONS OF HIGH INTENSITY ARCS (CPE-8008950 A02); 12 MONTHS \$110,296

EVANS, D FENNELL; UNDERSTANDING THE DIFFUSION OF SMALL SOLUTES (CPE-8014567 A01); 12 MONTHS \$52,757

FREDRICKSON, ARNOLD G; MICROBIAL PREDATION AND COMPETITION (CPE-8020783 A01); 12 MONTHS \$69,183

CUSSLER, EDWARD L, AND VICKERS, ZATA M; MODELING OF TEXTURAL PROPERTIES OF FOOD MATERIALS UNDERGOING PHASE TRANSITIONS (CPE-8025304 A01); 12 MONTHS \$47,881

CSKAM, HENDRIK J; STUDIES OF THE PROPERTIES OF GASEOUS AND PLASMAS BY MASS SPECTROMETER AND LIGHT SPECTROMETER TECHNIQUES (CPE-8105468 A01); 12 MONTHS \$68,570

GRIFFIN, GREGORY L; HIGH PRESSURE KINETIC MEASUREMENTS OF THE METHANOL SYNTHESIS REACTION ON WELL-CHARACTERIZED CU/ZNO SURFACES (CPE-8110754); 24 MONTHS \$79,459

ARIS, RUTHERFORD, AND SCHMIDT, LANNY D; DYNAMIC BEHAVIOR OF CATALYTIC REACTIONS AND REACTORS (CPE-8112592); 24 MONTHS \$125,509

MACOSKO, CHRIS W; INDUSTRY-UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: POLYURETHANE REACTION INJECTION MOLDING (CPE-8118232*); 12 MONTHS \$37,360

MCMURRY, PETER H, PUI, DAVID Y.H. AND LIU, BENJAMIN Y; *ULTRA-FINE AEROSOL STUDIES* (CPE-812024); 12 MONTHS \$48,725
 CHANIN, L. M. *ELECTRONEGATIVE GAS GLOW DISCHARGE INVESTIGATIONS* (CPE-812086); 9 MONTHS \$40,031

UNIVERSITY OF MINNESOTA AT SAINT PAUL

NEUMAN, RONALD D; *SPECIALIZED RESEARCH EQUIPMENT: LASER FLUORESCENCE APPARATUS FOR INTERFACIAL STUDIES* (CPE-8104550 A01); 6 MONTHS \$2,800

NEUMAN, RONALD D; *CAPILLARY WAVE PROPAGATION AND DAMPING* (CPE-8204095); 12 MONTHS \$70,000

MISSISSIPPI

UNIVERSITY OF MISSISSIPPI

REIDY, JAMES J. AND CRUM, LAWRENCE A; *NUCLEATION AND STABILIZATION OF CAVITATION NUCLEI IN LIQUIDS* (CPE-8022917 A02); 12 MONTHS \$35,882

MISSOURI

UNIVERSITY OF MISSOURI, COLUMBIA

PRELAS, MARK A, MILLER, WILLIAM H. AND MEYER, WALTER; *SPECIALIZED RESEARCH EQUIPMENT: A TRANSIENT RECORDER AND CONTROL UNIT FOR RESEARCH IN NUCLEONICS* (CPE-8115341); 12 MONTHS \$20,000

VISWANATH, DABIR S. AND STORVICK, TRUMAN S; *MEASUREMENT, CORRELATION, AND ESTIMATION OF GAS MIXTURE PVTX PROPERTIES. COAL GASIFICATION PROCESS STREAMS* (CPE-8117031); 12 MONTHS \$61,435

UNIVERSITY OF MISSOURI, ROLLA

O KEEFE, THOMAS J. AND JAMES, WILLIAM J; *INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: ROLE OF TRACE ELEMENTS AND ADDITIVES IN NON-FERROUS ELECTROLYTIC PROCESSING* (CPE-8004272 A02*); 12 MONTHS \$45,000

SCHMITT, JOHN L. AND ZALABSKY, RICHARD A; *NUCLEATION RATE MEASUREMENTS OF ETHANOL AND ETHANOL-WATER* (CPE-8203398); 12 MONTHS \$40,414

NEGLI, PARTHASAK; *RESEARCH INITIATION: SORPTION IN POLYMERS IN THE VICINITY OF GLASS TRANSITION* (CPE-8204313); 24 MONTHS \$48,000

WASHINGTON UNIVERSITY

SMITH, BUFORD D; *THE THERMODYNAMICS OF LIQUID MIXTURES* (CPE-8201579); 12 MONTHS \$70,000

MONTANA

MONTANA STATE UNIVERSITY

CHARACKLIS, WILLIAM G; *AN INVESTIGATION OF FUNDAMENTAL PROCESSES CONTRIBUTING TO MICROBIAL FOULING* (CPE-8017439 A01); 12 MONTHS \$72,752

ROSA, RICHARD J; *BOUNDARY LAYER ARC CHARACTERISTICS* (CPE-8200112); 12 MONTHS \$34,501

UNIVERSITY OF MONTANA

SHAFIZADEH, FRED; *CHEMICAL UTILIZATION OF CELLULOSIC MATERIALS* (CPE-8023854 A01); 12 MONTHS \$87,535

SHAFIZADEH, FRED; *BIOMATERIALS FROM SAGEBRUSH* (CPE-8112585 A01); 12 MONTHS \$55,667

NEBRASKA

UNIVERSITY OF NEBRASKA AT LINCOLN

BURROW, PAUL D; *THE STUDY OF VIBRATIONALLY EXCITED MOLECULES BY LOW ENERGY ELECTRON SCATTERING* (CPE-8012421 A01); 12 MONTHS \$27,017

NEVADA

UNIVERSITY OF NEVADA, RENO

JONES, DENNY A; *INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: ELECTROCHEMICAL KINETICS OF HYDROMETALLURGICAL PROCESSES* (CPE-8110020); 12 MONTHS \$63,838

REDDY, RAMANA G; *RESEARCH INITIATION: THERMODYNAMICS OF SOLUBILITY OF COBALT AND NICKEL IN NICKEL SMELTING SLAGS* (CPE-8204724); 24 MONTHS \$47,964

NEW JERSEY

COLLEGE OF MEDICINE & DENTISTRY OF NEW JERSEY-RUTGERS

MEDICAL SCHOOL

GHOSH, BIJAN K; *BIOMASS UTILIZATION: INCREASED YIELDS OF CELLULASE BY THE ENHANCEMENT OF SECRETION* (PCM-8108665*); 24 MONTHS \$10,000

PRINCETON UNIVERSITY

PRUD'HOMME, ROBERT K. AND SMALL, HAMISH; *INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: FUNDAMENTALS AND APPLICATIONS OF HYDRODYNAMIC CHROMATOGRAPHIC SEPARATIONS* (CPE-8003320 A01*); 12 MONTHS \$26,867

BRACCO, FREDIANO V; *COMBUSTION IN INTERNAL COMBUSTION ENGINES. EXPERIMENTAL ASSESSMENT OF TWO-DIMENSIONAL, UNSTEADY MODELS FOR UNIFORM CHARGES* (CPE-8003483 A02); 12 MONTHS \$67,345

WILLIAMS, FORMAN A; *STUDIES OF MECHANISMS BY WHICH DRY POWDERS AID IN EXTINGUISHMENT OF DIFFUSION FLAMES FOR CONDENSED FUELS* (CPE-8022918 A01); 12 MONTHS \$47,405

RUSSEL, WILLIAM B; *SEDIMENTATION AND DIFFUSION IN CONCENTRATED COLLOIDAL SUSPENSIONS* (CPE-8116339); 12 MONTHS \$34,259

RUTGERS UNIVERSITY-COOK COLLEGE

KOKINI, JOZEF L; *PREDICTING THE RHEOLOGY AND TEXTURE OF VISCOELASTIC FLUID FOOD MATERIALS* (CPE-8102898); 12 MONTHS \$28,456

NEW YORK

BROOKLYN COLLEGE

ROSEN, MILTON J. AND GODDARD, ERROL D; *INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: FUNDAMENTAL SURFACE PROPERTIES OF SURFACTANTS* (CPE-7825930 A01); 12 MONTHS \$49,450

CITY COLLEGE

ALFANO, ROBERT R; *ENERGY TRANSFER MECHANISMS STUDY WITH ULTRAFAST LASER TECHNIQUES* (CPE-7920192 A01); 9 MONTHS \$10,000

WEINSTEIN, HERBERT, AND GRAFF, ROBERT A; *INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: THE STRUCTURE AND OPERATING CHARACTERISTICS OF HIGH VELOCITY FLUIDIZED BEDS* (CPE-8103627); 12 MONTHS \$154,052

CLARKSON COLLEGE OF TECHNOLOGY

WEILAND, RALPH H; *INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: THICKENING OF SUSPENSIONS AIDED BY THE ADDITION OF BUOYANT PARTICLES* (CPE-8023185 A01); 12 MONTHS \$42,604

MATJEVIC, EGON, AND BAROUCH, EYTAN; *INTERACTIONS IN MULTIPLE COLLOIDAL SYSTEMS* (CPE-8111612); 12 MONTHS \$47,425

WEILAND, RALPH H; *STUDIES OF GAS DESORPTION FROM CHEMICALLY REACTIVE SOLUTION IN MODEL MASS TRANSFER DEVICES* (CPE-8119225); 12 MONTHS \$46,477

ARAS, SIGURDS, AND MOYER, CURT A; *MAGNETIC FILTRATION IN THE MICROSCOPIC AND SUBMICROSCOPIC REGIMES* (CPE-8203647); 12 MONTHS \$36,077

LUCIA, ANGELO; *RESEARCH INITIATION: A STUDY IN EQUATION-ORIENTED PROCESS OPTIMIZATION* (CPE-8204005); 24 MONTHS \$47,625

COLUMBIA UNIVERSITY-COLLEGE OF PHYSICIANS AND SURGEONS

KRASNA, ALVIN I; *BIOLOGICAL AND SYNTHETIC SYSTEMS FOR PRODUCTION OF HYDROGEN FROM WATER* (CPE-7927221 A01); 12 MONTHS \$125,451

COLUMBIA UNIVERSITY

HAPPEL, JOHN, AND CHEH, HUK Y; *TRANSIENT ISOTOPIC TRACING OF CATALYTIC METHANATION* (CPE-7804055 A02); 6 MONTHS \$5,809

SOMASUNDARAN, PONISSERI, AND HALVERSON, FREDERICK; *INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: FLOCCULATION OF CLAYS* (CPE-8011013 A01*); 12 MONTHS \$86,000

THEMELIS, NICKOLAS J; *THE KINETICS OF FLASH REACTION OF METAL SULFIDES IN OXYGEN STREAMS* (CPE-8110526); 12 MONTHS \$68,607

BILL, ROBERT G; *EFFECTS OF TURBULENCE ON RECIRCULATION, VORTEX SHEDDING AND FLAME STABILIZATION MECHANISMS* (CPE-8112662); 12 MONTHS \$63,342

HAPPEL, JOHN, AND CHEH, HUK Y; *TRANSIENT ISOTOPE TRACING OF CATALYTIC METHANATION OVER MOLYBDENUM SULFIDE* (CPE-8116015); 24 MONTHS \$119,246

SOMASUNDARAN, PONISSERI, AND DAHLSTROM, DONALD A; *MINERALS. COAL AND METAL EXTRACTION WITH MINIMUM WATER USAGE AND POLLUTION CONFERENCE* (CPE-8118187); 6 MONTHS \$5,000

GRYTE, CARL C; *APPLICATION OF COMPUTER ASSISTED TOMOGRAPHY TO OIL RECOVERY AND OTHER PROBLEMS IN FLOW THROUGH POROUS MEDIA* (CPE-8120846); 12 MONTHS \$65,900

SOMASUNDARAN, PONISSERI; *ABSORPTION FROM FLOODING SOLUTIONS IN POROUS MEDIA- A STUDY OF INTERACTIONS OF SURFACTANTS AND POLYMERS WITH RESERVOIR MINERALS* (CPE-8201216); 12 MONTHS \$75,484

CORNELL UNIVERSITY

SHULER, MICHAEL L; *MATHEMATICAL MODELS FOR PRODUCT FORMATION FROM MICROBIAL SYSTEMS* (CPE-7921259 A03*); \$5,254

STREETT, WILLIAM B. AND GUBBINS, KEITH E; *PHASE EQUILIBRIUM EXPERIMENTS IN FLUID SYSTEMS AT HIGH PRESSURES* (CPE-8104708); 12 MONTHS \$70,000

SHULER, MICHAEL L; *ENTRAPPED PLANT CELL CULTURES* (CPE-8114985); 12 MONTHS \$53,912

COOL, TERRILL A; *RESONANCE IONIZATION PROBE TECHNIQUES FOR COMBUSTION DIAGNOSTICS (ENGINEERING)* (CPE-8119408); 9 MONTHS \$38,000

CORNELL UNIVERSITY-CORNELL UNIVERSITY - ENDOWED

SHULER, MICHAEL L; *MATHEMATICAL MODELS FOR PRODUCT FORMATION FROM MICROBIAL SYSTEMS* (CPE-7921259 A02); 12 MONTHS \$70,443

WILSON, KENNETH G; *ACQUISITION OF AN ARRAY PROCESSOR FOR SCIENTIFIC COMPUTING* (DMR-7927167 A01*); 12 MONTHS \$40,000

POPE, STEPHEN B; *MONTÉ CARLO CALCULATIONS OF TURBULENT FLAMES* (CPE-8207790); 12 MONTHS \$23,952

CORNELL UNIVERSITY-CORNELL UNIVERSITY - STATE

KINSELLA, JOHN E; *SEPARATION OF PROTEIN AND RNA FROM YEAST: NEW CHEMICAL PROCESS* (CPE-8018394 A01); 12 MONTHS \$61,333

NEW YORK ACADEMY OF SCIENCES

LEVICH, BENJAMIN; *CONFERENCE ON PHYSICO-CHEMICAL HYDRODYNAMICS IV: JUNE 14-17, 1982; NEW YORK CITY* (CPE-8120567*); 12 MONTHS \$7,500

NEW YORK UNIVERSITY

LOW, MANFRED J. STUDIES OF REACTIONS ON CARBON AND COAL SURFACES (CPE-7922100 A02); 12 MONTHS \$62,842

POLYTECHNIC INSTITUTE OF NEW YORK

HAN, CHANG D. BUBBLE DYNAMICS IN STRUCTURAL FOAM PROCESSING (CPE-7910171 A02); 12 MONTHS \$64,210

HAN, CHANG D. AND STIEL, LEONARD I. INDUSTRY/UNIVERSITY CO-OPERATIVE RESEARCH: THERMODYNAMIC AND TRANSPORT PROPERTIES OF POLYMER DEVOLATILIZATION SYSTEMS (CPE-8202684); 12 MONTHS \$59,000

RENSSELAER POLYTECHNIC INSTITUTE

BUNGAY, HENRY R. ENGINEERING STUDIES WITH A DISSOLVED OXYGEN MICROPROBE (CPE-7920121 A02); \$8,438

CHUNG, CHAN I. DEVELOPMENT OF AN ANALYTICAL MELTING MODEL FOR POLYMER EXTRUSION (CPE-8002023 A01); 12 MONTHS \$65,721

ZELMAN, ALLEN, AND GISSER, DAVID. RAPID FILTRATION OF NON-ELECTROLYTES BY ELECTROOSMOSIS (CPE-8115007); 12 MONTHS \$57,515

RAJAGOPALAN, RAJ. EFFECTS OF PHYSICO-CHEMICAL PARAMETERS ON ADSORPTION OF SUBMICRON SPECIES (CPE-8116224); 24 MONTHS \$106,081

STATE UNIVERSITY AT BUFFALO

GOOD, ROBERT J. CONTACT ANGLES AS A MACROSCOPIC METHOD OF STUDYING MICROSCOPIC HETEROGENEITY AND ROUGHNESS OF MINERAL PARTICLES (CPE-7918245 A01); 12 MONTHS \$51,924

NANCOLLAS, GEORGE H. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: CRYSTALLIZATION AND DISSOLUTION OF FLUORIDE AND PHOSPHATE SALTS (CPE-8005345 A02); 12 MONTHS \$24,762

BENENSON, DAVID M. AND MALONE, DENNIS P. DIAGNOSTICS OF TURBULENT AND LAMINAR CO-AXIAL PLASMAS IN SUPERSONIC AND SUBSONIC FLOWS, BEFORE AND AFTER CURRENT ZERO (CPE-8007187 A02); 12 MONTHS \$100,000

KASPER, GERHARD, AND SHAW, DAVID T. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: EXPERIMENTAL INVESTIGATION OF DYNAMIC BEHAVIOR OF PARTICLE AGGREGATES (CPE-8024596 A01); 12 MONTHS \$71,705

SHAW, DAVID T. AND RICH, JOSEPH W. INDUSTRY/UNIVERSITY CO-OPERATIVE RESEARCH ACTIVITY: KINETICS OF VIBRATION-VIBRATION AND VIBRATION-ELECTRONIC ENERGY TRANSFERING MOLECULES (CPE-8025305*); 12 MONTHS \$80,000

GILL, WILLIAM N. AND MOLLENDORF, JOSEPH C. RATE DETERMINING MECHANISMS IN ICE CRYSTAL GROWTH WITH CONVECTIVE HEAT AND MASS TRANSFER (CPE-8112519); 12 MONTHS \$61,518

ULBRECHT, JAROMIR J. BUBBLE FORMATION IN VISCOUS AND RHEOLOGICALLY COMPLEX LIQUIDS (CPE-8117383*); 12 MONTHS \$44,365

RUCKENSTEIN, ELI. POTENTIAL BARRIER CHROMATOGRAPHY - HIGH PERFORMANCE LIQUID CHROMATOGRAPHY METHOD FOR PROTEIN SEPARATIONS (CPE-8117734); 12 MONTHS \$76,000

YANG, RALPH T. KINETICS AND MECHANISM OF GAS-CARBON REACTIONS STUDIED USING ELECTRON MICROSCOPY (CPE-8120569); 24 MONTHS \$80,295

KASPER, GERHARD, AND SHAW, DAVID T. ENGINEERING RESEARCH EQUIPMENT: HIGH RESOLUTION SCANNING ELECTRON MICROSCOPE SYSTEM (CPE-8200349); 12 MONTHS \$15,000

GUPTA, RAKESH K. RESEARCH INITIATION: CRYSTALLIZATION KINETICS OF ORIENTED POLYMERS FROM THE MOLTEN STATE (CPE-8204092); 24 MONTHS \$48,000

ANDREWS, GRAHAM F. RESEARCH INITIATION: A CONTINUOUS BIOREACTOR FOR PRODUCT INHIBITED FERMENTATIONS (CPE-8204968); 24 MONTHS \$47,890

STATE UNIVERSITY AT STONY BROOK

CHEVRAY, RENE. GAS PHASE REACTION IN A TURBULENT JET (CPE-8116033); 12 MONTHS \$39,654

SYRACUSE UNIVERSITY

ATKINSON, GEORGE H. FORMATION DYNAMICS OF GAS PHASE RADICAL AND MOLECULAR SPECIES (CPE-8012965 A01); 6 MONTHS \$5,000

SCHWARZ, JAMES A. AND HEYDWEILLER, JOHN C. STUDIES OF HETEROGENEOUS REACTION KINETICS BY MULTIPLE CYCLE TRANSIENT ANALYSIS (CPE-8119231); 24 MONTHS \$74,996

SCHWARZ, JAMES A. ENGINEERING RESEARCH EQUIPMENT: TEMPERATURE PROGRAMMED DESORPTION APPARATUS (CPE-8203776); 12 MONTHS \$14,055

TAVLARIDES, LAWRENCE L. MASS TRANSFER/REACTION IN LIQUID-LIQUID DISPERSIONS (CPE-8209634); 12 MONTHS \$58,000

STERN, S A. TRAVEL TO ATTEND A SYMPOSIUM ON 'MEMBRANES AND MEMBRANE PROCESSES' AT PERUGIA, ITALY, MAY 19-22, 1982 (CPE-8211623); 6 MONTHS \$875

UNITED ENGINEERING TRUSTEES INC

VENKATASUBRAMAN, K. THIRD INTERNATIONAL RESEARCH CONFERENCE ON BIOCHEMICAL ENGINEERING; SANTA BARBARA, CALIFORNIA; SEPTEMBER 19-24, 1982 (CPE-8210605*); 12 MONTHS \$17,000

UNIVERSITY OF ROCHESTER

HEIST, RICHARD H. HOMOGENEOUS NUCLEATION RATE INVESTIGATIONS USING A DIFFUSION CLOUD CHAMBER (CPE-8119892); 24 MONTHS \$78,366

FEINBERG, MARTIN R. A THEORY OF CHEMICAL REACTION NETWORKS: THE DYNAMICS OF REACTORS WITH COMPLEX CHEMISTRY (CPE-8210574); 12 MONTHS \$43,652

NORTH CAROLINA

NORTH CAROLINA STATE UNIVERSITY AT RALEIGH

HOPFENBERG, HAROLD B. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: TRANSPORT AND RELAXATION IN GLASSY POLYMERS (CPE-7920740 A01*); 12 MONTHS \$19,756

CHANG, HOU-MIN. BIODEGRADATION OF LIGNIN BY WHITE-ROT FUNGI (CPE-8016310 A01); 12 MONTHS \$54,600

WORK, ROBERT W. THE PHYSICO-CHEMICAL PROPERTIES OF CERTAIN POLYPEPTIDE (SPIDER) FIBERS AND THEIR ENGINEERING IMPLICATIONS (PCM-8119075*); 12 MONTHS \$20,000

GARDNER, ROBIN P. AND VERGHESE, KURUVILLA. ENGINEERING RESEARCH EQUIPMENT: A STATE-OF-THE-ART HIGH PURITY GERMANIUM DETECTOR SYSTEM (CPE-8202712); 12 MONTHS \$16,384

TORQUATO, SALVATORE. RESEARCH INITIATION: STATISTICAL MECHANICS OF HEAT CONDUCTION IN INHOMOGENEOUS MATERIALS (CPE-8211966); 24 MONTHS \$44,186

TRAVEL AWARD

GARDNER, ROBIN P. TRAVEL TO ATTEND RADIOISOTOPE APPLICATION AND RADIATION PROCESSING IN INDUSTRY; LEIPZIG, WEST GERMANY; SEPTEMBER 28 - OCTOBER 1, 1982 (CPE-8211899); 6 MONTHS \$1,050

OHIO

CASE WESTERN RESERVE UNIVERSITY-CASE INSTITUTE OF TECHNOLOGY

LIU, CHUNG-CHI. INVESTIGATION OF ELECTROCHEMICAL FLUORINATION PROCESS (CPE-8120216); 24 MONTHS \$84,996

ADLER, ROBERT J. AND GORENSEK, MAXIMILIA B. FRACTIONATING SLURRIES OF FINE MINERAL PARTICLES USING PERIODIC FLOWS IN A CENTRIFUGAL FORCE FIELD (CPE-8121096); 12 MONTHS \$53,150

CASE WESTERN RESERVE UNIVERSITY

JAMIESON, ALEXANDER M. QUASIELASTIC LIGHT SCATTERING STUDIES OF MACROMOLECULAR TRANSPORT IN ENTANGLED POLYMER SOLUTIONS (CPE-8017821 A01); 12 MONTHS \$56,016

ADLER, ROBERT J. AND EDWARDS, ROBERT V. SIMULTANEOUS MIXING AND CHEMICAL REACTION (CPE-8017868 A01); 12 MONTHS \$77,191

BROSILOW, COLEMAN B. DEVELOPMENT AND ANALYSIS OF COORDINATION ALGORITHMS FOR THE SIMULATION OF INTEGRATED DYNAMIC SYSTEMS (ECS-8110040*); 24 MONTHS \$36,000

ROGERS, CHARLES E. AND TAYLOR, PHILIP L. CHARACTERIZATION OF THE STRUCTURE OF IONOMERIC MEMBRANE SEPARATOR (CPE-8115115); 12 MONTHS \$47,000

FEKE, DONALD L. RESEARCH INITIATION: AGEING EFFECTS IN ELECTROCRATIC COLLOIDS (CPE-8204873); 24 MONTHS \$48,000

OHIO STATE UNIVERSITY

KNAEBEL, KENT S. TRAVEL TO ATTEND A NATO ADVANCED STUDY INSTITUTE ON MASS TRANSFER AND KINETICS OF ION EXCHANGE IN MARATEA, ITALY, MAY 31-JUNE 11, 1982 (CPE-8211611); 6 MONTHS \$1,155

OHIO UNIVERSITY

COLLIER, JOHN R. FIXED BOUNDARY POLYMER EXTRUSION-ORIENTATION-CRYSTALLIZATION (CPE-7912376 A02); 12 MONTHS \$38,440

UNIVERSITY OF CINCINNATI

WILLEKE, KLAUS. SIZE CLASSIFICATION OF FINE PARTICLES BY OPPOSING JETS (CPE-7926451 A02); 12 MONTHS \$36,701

WEISMAN, JOEL. INVESTIGATION OF TWO-PHASE (VAPOR-LIQUID) FLOW PATTERNS DURING TRANSIENTS (CPE-8121986); 24 MONTHS \$70,190

WILLEKE, KLAUS. PARTICULATE SAMPLING EFFICIENCIES OF INLETS IN AIR (CPE-8213269); 12 MONTHS \$51,154

UNIVERSITY OF TOLEDO

EDWARDS, JIMMIE G. VAPORIZATION CHEMISTRY AND THERMODYNAMICS OF TERNARY CHALCOGENIDES BY COMPUTER-AUTOMATED METHODS (CPE-8103676); 24 MONTHS \$110,408

OKLAHOMA

UNIVERSITY OF OKLAHOMA NORMAN CAMPUS

SCAMEHORN, JOHN F. RESEARCH INITIATION: STUDY OF INTERACTIONS BETWEEN IONIC AND NONIONIC SURFACTANTS (CPE-8204620); 24 MONTHS \$48,000

UNIVERSITY OF TULSA

LUKS, KRAEMER D. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: EXPERIMENTAL STUDY OF THE PHASE EQUILIBRIA BEHAVIOR OF CO₂HYDROCARBON SYSTEMS (CPE-8100430); 12 MONTHS \$35,145

ARIMAN, TEOMAN, BERGMAN, WERNER, AND RUSEK, STANLEY. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: ELECTROSTATICALLY ENHANCED FIBROUS FILTRATION OF AEROSOLS (CPE-8101947 A01*); 12 MONTHS \$50,544

OREGON

OREGON STATE UNIVERSITY

LEVENSPIEL, OCTAVE. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: GAS/SOLID CONTACTING IN FLUIDIZED BEDS (CPE-8026799 A01); 12 MONTHS \$84,661

PENNSYLVANIA

CARNEGIE-MELLON UNIVERSITY-CARNEGIE INSTITUTE OF TECHNOLOGY

- KO, EDMOND I. THE EFFECT OF CRYSTALLITE SIZE ON CHEMISORPTION AND CATALYTIC PROPERTIES (CPE-8115575); 24 MONTHS \$95,399
- ANDERSON, JOHN L. AND PRIEVE, DENNIS C. CHEMICALLY-DRIVEN PARTICLE MOTION (CPE-8121332); 12 MONTHS \$44,010
- GROSSMANN, IGNACIO E. SYSTEMATIC PROCEDURES FOR EVALUATING AND OPTIMIZING FLEXIBILITY IN THE DESIGN OF CHEMICAL PLANTS (CPE-8121665); 12 MONTHS \$34,500
- KO, EDMOND I. AND SHIFLETT, W K. ENGINEERING RESEARCH EQUIPMENT: THERMOGRAVIMETRIC AND DIFFERENTIAL THERMAL ANALYSIS SYSTEM (CPE-8203196); 12 MONTHS \$24,745

CARNEGIE-MELLON UNIVERSITY

- ANDERSON, JOHN L. HINDERED DIFFUSION WITH CHEMICAL REACTION IN SMALL PORES (CPE-8005344 A02*); 12 MONTHS \$54,435
- SIRIGNANO, WILLIAM A. AND CALCOTE, HARTWELL F. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: TURBULENT CHEMICALLY REACTING AXISYMMETRIC JETS (CPE-8014661 A02*); 12 MONTHS \$113,627
- WARREN, GARRY W. SILVER CATALYSIS IN SULFIDE LEACHING REACTIONS (CPE-8108296 A01); 12 MONTHS \$56,051
- TUMA, DAVID T. STUDIES OF HIGH PRESSURE, CONVECTION-STABILIZED ARCS (CPE-8111625); 12 MONTHS \$62,649
- JAIN, RAKESH K. BLOOD FLOW AND MACROMOLECULAR TRANSPORT IN A TUMOR CAPILLARY BED DURING NORMO- AND HYPERTHERMIA (CPE-8111626); 12 MONTHS \$71,382
- FRUEHAN, R J. KINETICS OF SLAG-METAL REACTIONS (CPE-8116484 A01); 12 MONTHS \$74,898
- PRIEVE, DENNIS C. THE EFFECT OF SURFACE FORCES ON THE BEHAVIOR OF A CHARGED COLLOIDAL PARTICLE NEAR A PLATE (CPE-8119009); 12 MONTHS \$44,715
- BIEGLER, LORENZ T. RESEARCH INITIATION: IMPROVED OPTIMIZATION METHODS FOR SEQUENTIAL MODULAR SIMULATORS (CPE-8204366); 24 MONTHS \$46,426
- SIDES, PAUL J. RESEARCH INITIATION: CONCENTRATION DEPENDENT DIFFUSION COEFFICIENTS OF COMPLEX ANIONS IN THE ZINC/CHLORINE BATTERY (CPE-8204367); 24 MONTHS \$47,995
- JHON, MYUNG S. RESEARCH INITIATION: AN ASPECT OF POLYMER PROCESSING FUNDAMENTALS - POLYMER OR PARTICLE MIGRATION IN SOLUTIONS AND MELTS WITH NONHOMOGENEOUS FLOW (CPE-8204509); 24 MONTHS \$45,798
- HENEIN, HANI. RESEARCH INITIATION: SEGREGATION OF GRANULAR SOLIDS IN ROTARY KILNS (CPE-8204522); 24 MONTHS \$48,000
- LAWLESS, JOHN. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH PROJECTS: THERMIONIC ENERGY CONVERSION LASER FEASIBILITY INVESTIGATION (CPE-8204813*); 12 MONTHS \$22,791

COMBUSTION INSTITUTE

- FRIEDMAN, RAYMOND. NINETEENTH SYMPOSIUM (INTERNATIONAL) ON COMBUSTION TECHNIQUE-ISRAEL INSTITUTE OF TECHNOLOGY, HAIFA, ISRAEL (CPE-8120119); \$6,000
- FRIEDMAN, RAYMOND. GROUP TRAVEL FOR U.S. PARTICIPANTS AT THE NINETEENTH INTERNATIONAL SYMPOSIUM ON COMBUSTION, HAIFA, ISRAEL, AUGUST 8-13, 1982 (CPE-8120506); 6 MONTHS \$7,200

DREXEL UNIVERSITY

- COHEN, RICHARD S. AND CERNANSKY, NICHOLAS P. INTERACTIVE MULTUSER LABORATORY DATA SYSTEM (CPE-8023880); 12 MONTHS \$38,812
- CERNANSKY, NICHOLAS P. AND COHEN, RICHARD S. SPECIALIZED ENGINEERING EQUIPMENT FOR COMBUSTION RESEARCH (CPE-8112077); 9 MONTHS \$9,000
- CERNANSKY, NICHOLAS P. CHEMISTRY AND PHYSICS OF OXYGENATE AND ODOR FORMATION IN DIESEL ENGINES (CPE-8120929); 12 MONTHS \$71,000

LEHIGH UNIVERSITY

- MANSON, JOHN A. AND SPERLING, LESLIE H. NEW POLYMERS BASED ON INDUSTRIAL OILS FROM RENEWABLE RESOURCES (CPE-8109099); 12 MONTHS \$45,000
- EL-AASSER, MOHAMED S. FORMATION AND STABILIZATION OF MIN-EMULSIONS AND LATEXES (CPE-8111923); 12 MONTHS \$48,847
- KARGL, FIKRET. MICROBIAL LEACHING OF SULFUR COMPOUNDS FROM COAL BY THE THERMOPHILIC MICROORGANISM SULFOLOBUS ACIDOCALDARIUS (CPE-8201196); 12 MONTHS \$44,075
- LEVY, EDWARD K. AND CARAM, HUGO S. ELUTRIATION FROM GAS FLUIDIZED BEDS (CPE-8203918); 12 MONTHS \$89,500

PENNSYLVANIA STATE UNIVERSITY

- DANNER, RONALD P. THEORETICAL AND EXPERIMENTAL STUDIES OF GAS MIXTURE ADSORPTION (CPE-8012423 A01); 12 MONTHS \$51,941
- VANNICE, M ALBERT, AND GEOFFROY, GREGORY L. THE PREPARATION, SINTERING, AND CATALYTIC BEHAVIOR OF SUPPORTED SILVER CATALYSTS (CPE-8013968 A01*); 12 MONTHS \$36,222
- SIMKOVICH, GEORGE, AND APLAN, FRANK F. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: EFFECTS OF SOLID STATE POINT DEFECTS UPON MINERAL BENEFICIATION PROCESSES (CPE-8024705 A01); 12 MONTHS \$51,944
- HELFFERICH, FRIEDRICH G. ION EXCHANGE KINETICS - ANIONS OF POLYBASIC ACIDS (CPE-8107472); 24 MONTHS \$74,232
- OSSEO-ASARE, K. INTERFACIAL CHEMISTRY OF METALLURGICAL SOLVENT EXTRACTION PROCESSES (CPE-8110758 A01); 12 MONTHS \$69,970

APLAN, FRANK F. AND KLIMPEL, RICHARD R. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: THE EVALUATION OF FLOTATION COLLECTING AGENTS IN THE LABORATORY AND IN INDUSTRIAL MILLING OPERATIONS (CPE-8111792*); 12 MONTHS \$44,500

ROY, DELLA M. HYDRATION REACTION MECHANISMS AND THEIR EFFECTS UPON PROPERTIES OF CEMENTS WITH MINERAL WASTE SUBSTITUENTS (CPE-8112821); 12 MONTHS \$43,145

ROY, DELLA M. HYDRATION REACTION MECHANISMS AND THEIR EFFECTS UPON PROPERTIES OF CEMENTS WITH MINERAL WASTE SUBSTITUENTS (CPE-8112821 A01); 6 MONTHS \$6,000

HELFFERICH, FRIEDRICH G. ION EXCHANGE COLUMNS - MULTICOMPONENT EXCHANGE INVOLVING ANIONS OF POLYBASIC ACIDS (CPE-8115114); 12 MONTHS \$34,792

DEB ROY, T. THE NUCLEATION GROWTH AND SETTLING OF A METAL PHASE DURING GASEOUS REDUCTION OF OXIDE MELTS (CPE-8120874); 12 MONTHS \$54,000

HOGG, R. AND KLIMPEL, RICHARD R. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: FUNDAMENTALS OF THE FLOCCULATION PROCESS IN CHEMICAL ENGINEERING (CPE-8121731); 12 MONTHS \$39,117

NAGARAJAN, R. RESEARCH INITIATION: 'CHEMICAL SEPARATIONS USING VESICLES' (CPE-8204324); 24 MONTHS \$48,000

MCGRATH, ROBERT T. RESEARCH INITIATION: REDEPOSITION OF THE SPUTTERED SURFACE OF FUSION LIMITERS (CPE-8204772); 12 MONTHS \$27,004

VANNICE, M ALBERT, GEOFFROY, GREGORY L. AND MULAY, LAXMAN N. CARBON-SUPPORTED METALS AND METAL CLUSTERS AS HYDROGENATION CATALYSTS (CPE-8205937); 12 MONTHS \$89,966

TRAVEL AWARD

VANNICE, M ALBERT. TRAVEL TO ATTEND: CHINA-JAPAN-U.S. TRIPARTITE SYMPOSIUM OF CATALYSIS: DALIAN, CHINA, SEPT. 1-4, 1982 (CPE-8217028); 6 MONTHS \$1,143

SEIDER, WARREN D. INTERNATIONAL TRAVEL SUPPORT TO ATTEND THE AIChE-CIESC MEETING IN BEIJING, CHINA, SEPTEMBER 19-24, 1982 (ENG-8218313); 3 MONTHS \$1,503

UNIVERSITY OF PENNSYLVANIA

PERLMUTTER, DANIEL D. KINETICS OF REACTION IN POROUS SOLIDS: EVALUATION OF A RANDOM-PORE MODEL (CPE-8000291 A02); 12 MONTHS \$52,044

MYERS, ALAN L. ADSORPTION ON HETEROGENEOUS SURFACES (CPE-8117188); 12 MONTHS \$64,670

SEIDER, WARREN D. ANALYSIS OF AZEOTROPIC DISTILLATION TOWERS (CPE-8118023); 12 MONTHS \$47,150

GORTE, RAYMOND J. RESEARCH INITIATION: METAL-SUPPORT INTERACTION STUDIES ON CLEAN METAL SURFACES (CPE-8203968); 24 MONTHS \$48,000

FOSTER, KENNETH R. DIELECTRIC STUDIES ON MICROEMULSIONS (CPE-8204911*); 12 MONTHS \$61,947

UNIVERSITY OF PITTSBURGH-SCHOOL OF MEDICINE

WINGARD, LEMUEL B. IMMOBILIZED FLAVIN COFACTOR ELECTRODES (CPE-8107715); 12 MONTHS \$53,934

UNIVERSITY OF PITTSBURGH

PLAZEK, DONALD J. A STUDY OF THE RELATION OF POLYMER PROCESSING BEHAVIOR TO MECHANICAL CHARACTERIZATION PARAMETERS (CPE-8024713 A01); 12 MONTHS \$50,676

BISHOP, ALFRED A. SHAH, YATISH T. AND DOUGALL, RICHARD S. FORCED CONVECTION TWO-PHASE HYDRODYNAMICS AND HEAT TRANSFER IN NON-NEWTONIAN POLYMER SOLUTION-GAS MIXTURES (CPE-8115208); 12 MONTHS \$88,195

HOLDER, GERALD D. THE FORMATION OF HYDRATE AZEOTROPES AND THE ENHANCED SOLUBILITIES OF GASES IN WATER AT HYDRATE FORMING CONDITIONS (CPE-8115639); 12 MONTHS \$56,412

KLINZING, GEORGE E. STABILITY OF VERTICAL GAS-SOLID TRANSITION FLOW WITH ELECTROSTATICS (CPE-8209853); 12 MONTHS \$33,806

WESTINGHOUSE ELECTRIC CORPORATION

MENAB, IAN R. HUGHES, WILLIAM F. AND WALKER, JOHN S. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: HIGH INTERACTION PARAMETER MAGNETOFLUIDYNAMIC STUDIES IN LIQUID METAL FLOWS (CPE-8108952*); 12 MONTHS \$75,496

RHODE ISLAND

BROWN UNIVERSITY

MASON, EDWARD A. TRANSPORT THEORY FOR FLUIDS IN MEMBRANES (CPE-8107269); 12 MONTHS \$55,000

GORDON RESEARCH CONFERENCES

VANNICE, M ALBERT. 1982 GORDON RESEARCH CONFERENCE ON CATALYSIS (CPE-8120494); 8 MONTHS \$8,000

KLEIN, ELIAS. GORDON RESEARCH CONFERENCE ON SYNTHETIC MEMBRANES - 1982 PLYMOUTH, NEW HAMPSHIRE, JULY 5-9, 1982 (CPE-8204565); 6 MONTHS \$4,450

LINDSEY, PAUL C. GORDON CONFERENCE ON PLASMA CHEMISTRY, AUGUST 1982 (CPE-8205446); 6 MONTHS \$5,500

UNIVERSITY OF RHODE ISLAND

GONZALEZ, RICHARD D. SIMULTANEOUS INFRARED AND KINETIC STUDIES OF SUPPORTED GROUP VIII METALS AND SUPPORTED BIME-TALLIC CLUSTERS (CPE-7920155 A02); 12 MONTHS \$34,578

ESTRIN, JOSEPH, AND TADROS, MAHER K. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: THE MECHANISMS OF GROWTH

AND MORPHOLOGICAL STABILITY OF SPARINGLY SOLUBLE SALTS (CPE-8018110 A02*); 12 MONTHS \$38,779

SOUTH CAROLINA

UNIVERSITY OF SOUTH CAROLINA AT COLUMBIA

SUDARSHAN, TANGALI S. AND THOMPSON, JAMES E.; LIQUID METAL WETTING OF METAL AND INSULATOR SURFACES FOR HIGH POWER APPLICATIONS (CPE-8024712 A01); 12 MONTHS \$63,268

THOMPSON, JAMES E. AND SUDARSHAN, TANGALI S.; TENTH INTERNATIONAL SYMPOSIUM ON DISCHARGES AND ELECTRICAL INSULATION IN VACUUM; COLUMBIA, SOUTH CAROLINA; OCTOBER 25-28, 1982 (CPE-8215281); 5 MONTHS \$2,000

TEXAS

NORTH TEXAS STATE UNIVERSITY

DUGGAN, JEROME L.; SEVENTH CONFERENCE ON THE APPLICATION OF ACCELERATORS IN RESEARCH AND INDUSTRY; DENTON, TEXAS; NOVEMBER 1-3, 1982 (29Y-8120735*); 12 MONTHS \$2,000

RICE UNIVERSITY

ROWLEY, RICHARD L.; MULTICOMPONENT LIQUID-LIQUID EQUILIBRIA SURFACES FROM BINARY HEATS OF MIXING (CPE-8022908 A01); 12 MONTHS \$40,000

KOBAYASHI, RIKI; THE STUDY OF PHASE EQUILIBRIUM IN FLUID-HYDRATE SYSTEMS (CPE-8110853); 12 MONTHS \$60,000

TEXAS A & M UNIVERSITY

HALL, KENNETH R.; THERMODYNAMIC PROPERTIES MEASUREMENTS WITH A MULTIPLE BURNETT-ISOTHERM APPARATUS (CPE-7919537 A02); 12 MONTHS \$50,571

GLOVER, CHARLES J. AND WATSON, ALBERT T.; VAPOR-LIQUID EQUILIBRIA IN SOLVENT/POLYMER/SOLVENT SYSTEMS BY GAS CHROMATOGRAPHY (CPE-8111272); 24 MONTHS \$93,277

CHOU, JOSEPH K.; RESEARCH INITIATION: AN EXPERIMENTAL INVESTIGATION OF ACOUSTIC SCRUBBERS FOR SOOT EMISSION CONTROL (CPE-8205363); 24 MONTHS \$40,000

UNIV OF TEXAS AT AUSTIN

EDGAR, THOMAS F.; ADVANCED CONTROL STRATEGIES FOR DISTILLATION COLUMNS (CPE-8111613); 12 MONTHS \$47,322

LAGOWSKI, JOSEPH J.; THE CHEMISTRY OF GOLD ANIONS, AU⁻ (CPE-8117677); 12 MONTHS \$40,000

LILJESTRAND, HOWARD M.; RESEARCH INITIATION: AQUEOUS NITROGEN OXIDE OXIDATION KINETICS (CPE-8205162); 24 MONTHS \$48,000

UNIVERSITY OF HOUSTON CENTRAL CAMPUS

LUSS, DAN; EXPERIMENTAL AND ANALYTICAL STUDY OF STEADY-STATE MULTIPLICITY AND DYNAMICS OF CATALYTIC REACTORS (CPE-7925381 A02); 12 MONTHS \$48,994

JACKSON, ROY, AND GWYN, JOHN E.; INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: THE MECHANICS OF FLOW OF PARTICULATE MEDIA (CPE-8011268 A01*); 12 MONTHS \$25,196

DUKLER, ABRAHAM E.; INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: STRUCTURE IN TWO PHASE ANNULAR FILM FLOW AND THE PROCESS OF ENTRAINMENT GENERATION (CPE-8113568); 12 MONTHS \$49,321

POLLARD, RICHARD; RESEARCH INITIATION: ANALYSIS OF THE INFLUENCE OF ELECTRIC FIELD ON CHEMICAL VAPOR DEPOSITION OF SILICON (CPE-8203554); 24 MONTHS \$47,944

UTAH

BRIGHAM YOUNG UNIVERSITY

IZATT, REED M., LAMB, JOHN D., BRADSHAW, JERALD S. AND CHRISTENSEN, JAMES J.; SOLVENT EXTRACTION OF HEAVY METAL CATIONS USING MACROCYCLIC LIGANDS WITH APPLICATION TO HYDROMETALLURGICAL EXTRACTION (CPE-8119634); 12 MONTHS \$35,951

UNIVERSITY OF UTAH

MILLER, JAN D.; INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: ENHANCED SULFIDE MINERAL LEACHING BY ALTERATION OF REACTION PRODUCT LAYERS VIA PARTICLE ADDITIONS (CPE-8107763); 12 MONTHS \$77,848

RUSHFORTH, CRAIG K., RUSHFORTH, CRAIG K. AND LEIF, ROBERT C.; INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: RESONANT SCATTERING FOR CHARACTERIZATION OF DIELECTRIC PARTICULATES AND MULTICOMPONENT SYSTEMS (CPE-8116087*); 12 MONTHS \$24,210

SOHN, H. Y. AND RICHARDS, K. J.; INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: A FUNDAMENTAL INVESTIGATION OF FLASH SMELTING PROCESSES (CPE-8204280*); 12 MONTHS \$39,598

VIRGINIA

UNIVERSITY OF VIRGINIA

GAINER, JOHN L., KIRWAN, DONALD J. AND GADEN, ELMER L.; PERFORMANCE OF ADSORBED AND COVALENTLY-BOUND MICROBES (CPE-8004373 A02); 12 MONTHS \$80,280

HUDSON, J. L.; OSCILLATION AND CHAOS IN A CHEMICAL REACTOR (CPE-8021950 A01); 12 MONTHS \$42,360

STONER, GLENN E. AND CAHEN, G. L.; ELECTROCHEMICAL RECOVERY AND/OR TREATMENT PROCEDURES INVOLVING DILUTE SOLUTIONS (CPE-8119765); 12 MONTHS \$44,032

GADEN, ELMER L.; WORKSHOP ON PROSPECTS FOR BIOTECHNOLOGY (CPE-8120390); 6 MONTHS \$24,512

KIRWAN, DONALD J., GAINER, JOHN L. AND GADEN, ELMER L.; SPECIALIZED ENGINEERING RESEARCH EQUIPMENT: UV-VISIBLE SPECTROPHOTOMETER FOR BIOCHEMICAL ENGINEERING LABORATORY (CPE-8203281); 12 MONTHS \$6,750

TRIPHOTOMETER FOR BIOCHEMICAL ENGINEERING LABORATORY (CPE-8203281); 12 MONTHS \$6,750

VIRGINIA POLYTECHNIC INSTITUTE

YOON, ROE HOAN; COLLECTORLESS FLOTATION OF CHALCOPYRITE AND SPHALERITE ORES (CPE-8011456 A01); 12 MONTHS \$46,313

THOMAS, JAMES R.; ANALYSIS OF EXPLORATION/CONDENSATION TRANSPORT THEORY COMPUTATIONAL METHODS (CPE-8107473); 24 MONTHS \$56,057

BAIRD, DONALD G.; RHEOLOGICAL MODELING OF THE FOOD EXTRUSION PROCESS (CPE-8122088); 12 MONTHS \$28,987

LIU, Y. A., SQUIRES, ARTHUR M., KONRAD, KENNETH, AND SEBBA, FELIX; ENGINEERING RESEARCH EQUIPMENT: HIGH-SPEED MOVIE CAMERA FOR FLUID-PARTICLE SEPARATION AND FLUIDIZATION RESEARCH (CPE-8203396); 12 MONTHS \$8,200

WASHINGTON

UNIVERSITY OF WASHINGTON

CHRISTIANSEN, WALTER H. AND HERTZBERG, ABRAHAM; LASER INDUCED MOLECULAR SEPARATIONS (CPE-8023187 A01); 12 MONTHS \$81,138

ALBRECHT, ROBERT W.; STOCHASTIC DATA ANALYSIS SYSTEM (CPE-8105161); 12 MONTHS \$40,573

BERG, JOHN C.; SPREADING OF OIL FILMS ON WATER IN THE SURFACE TENSION REGIME (MEA-8109236*); 12 MONTHS \$22,881

RICKER, NEIL L. AND FARRINGTON, T.; INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: MODEL ALGORITHMIC CONTROL OF CHEMICAL PROCESSES (CPE-8113056); 12 MONTHS \$34,286

FINLAYSON, BRUCE A.; MATHEMATICAL MODELING OF POLYMER FLOWS (CPE-8115358); 12 MONTHS \$51,393

HALEY, GEORGE D. AND BENESI, H. A.; SURFACE ACIDITY OF SOLID CATALYSTS (CPE-8120682); 12 MONTHS \$59,858

MCCARTHY, JOSEPH L. AND YAN, JOHNSON F.; INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: DEPOLYMERIZATION OF LIGNINS (CPE-8121442); 12 MONTHS \$65,325

RAO, Y. K.; CATALYSIS OF REDUCTION OF SULFIDES (CPE-8202588); 12 MONTHS \$26,475

RAO, Y. K.; MECHANISM OF CATALYSIS OF THE BOUDOUARD REACTION (CPE-8203725); 24 MONTHS \$70,840

HAGER, HAROLD E.; RESEARCH INITIATION: ELECTRICAL DOUBLE LAYER STRUCTURE AT HIGH FARADAY CURRENT DENSITIES (CPE-8204969); 24 MONTHS \$48,000

BOWEN, J. RAY; PUBLICATION OF THE PROCEEDINGS OF THE EIGHTH INTERNATIONAL COLLOQUIUM ON GASDYNAMICS OF EXPLOSIONS AND REACTIVE SYSTEMS (CPE-8205737); 12 MONTHS \$10,500

WASHINGTON STATE UNIVERSITY

MAHALINGAM, R.; ENGINEERING RESEARCH EQUIPMENT: ELECTRICAL AEROSOL SIZE ANALYZER (CPE-8120813); 12 MONTHS \$10,000

MAHALINGAM, R.; GAS-LIQUID INTERACTION IN TWO-PHASE GAS-NON-NEWTONIAN LIQUID FLOW (CPE-8211480); 12 MONTHS \$39,329

WEST VIRGINIA

WEST VIRGINIA UNIVERSITY

WHITTING, WALLACE B. AND KEAIRNS, DALE L.; INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: JETTING AND BUBBLING PHENOMENA IN A HOT FLUIDIZED BED (CPE-8112948); 12 MONTHS \$57,532

WISCONSIN

UNIVERSITY OF WISCONSIN-MADISON

STEWART, WARREN E.; TRANSPORT PHENOMENA AND REACTOR MODELLING (CPE-7913162 A02*); 12 MONTHS \$53,410

LUND, DARYL B. AND CHAPMAN, THOMAS W.; INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: FOULING OF HEAT TRANSFER SURFACES IN FOOD PROCESSING SYSTEMS (CPE-8020627 A01*); 12 MONTHS \$19,929

BIRD, R. BYRON; MACROMOLECULAR HYDRODYNAMICS (CPE-8104705); 12 MONTHS \$111,580

CHANG, Y. AUSTIN; THERMODYNAMICS OF METAL-SULFUR MELTS RELEVANT TO THE EXTRACTION AND REFINING OF NON-FERROUS METALS (CPE-8110852 A01); 12 MONTHS \$65,720

MORARI, MANFRED; A MODULAR APPROACH TO THE DESIGN AND OPERATION OF CHEMICAL PLANTS UNDER CONSIDERATION OF DYNAMIC ASPECTS (CPE-8115022); 12 MONTHS \$53,882

LANGER, STANLEY H.; ELECTROGENERATIVE PROCESS STUDIES (CPE-8119232); 12 MONTHS \$50,570

DUMESIC, JAMES A.; INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: GEOMETRICALLY DESIGNED CATALYSTS IN THE STUDY OF MULTI-COMPONENT CATALYSIS (CPE-8121717*); 12 MONTHS \$48,000

MEYER, RICHARD E.; ADVANCED SEMINAR ON THE THEORY OF DISPERSED MULTIPHASE FLOW; MADISON, WISCONSIN; MAY 26-28, 1982 (CPE-8203292*); 12 MONTHS \$3,123

RAY, W. HARMON; FUNDAMENTAL STUDIES IN COMPUTER CONTROL (CPE-8203395); 24 MONTHS \$20,000

UNIVERSITY OF WISCONSIN-MILWAUKEE

KEULKS, GEORGE W.; CHARACTERIZATION OF INLET AND OUTLET SITES FOR OXYGEN ON SELECTIVE OXIDATION CATALYSTS (CPE-8120433); 24 MONTHS \$91,542

CIVIL AND ENVIRONMENTAL ENGINEERING

ARIZONA

ARIZONA STATE UNIVERSITY

HIGGINS, THOMAS E. ACQUISITION OF INSTRUMENT FOR DETERMINATION OF TOTAL ORGANIC CARBON IN WATER AND WASTEWATER (CEE-8121732); 6 MONTHS \$7,435

SINGHAL, AVI C. DYNAMIC TESTING SYSTEM FOR BURIED PIPE LINES (CEE-8200530); 12 MONTHS \$80,000

UNIVERSITY OF ARIZONA

WEBER, JEAN E. AND DUCKSTEIN, LUCIEN; CRITERIA FOR CHOOSING A REGRESSION METHOD IN ENGINEERING DECISION-MAKING (CEE-7905010 A02); 12 MONTHS \$93,535

BHATTACHARYA, RABINDRA N. FUNDAMENTAL STUDIES ON SUB-SURFACE TRANSPORT THEORY (CEE-8004499 A02); 12 MONTHS \$18,500

HOENIG, STUART A. DETECTION OF PRE-ROCK BURST PHENOMENA (CEE-8008062 A01); 12 MONTHS \$49,999

DUCKSTEIN, LUCIEN, AND YAKOWITZ, SIDNEY J. MODERN STABILITY AND NUMERICAL CONCEPTS IN WATER RESOURCE MANAGEMENT (CEE-8110778); 12 MONTHS \$85,345

DESAL, C S. MECHANICS OF SOIL-TOOL INTERACTION IN TILLAGE (CEE-8116949); 12 MONTHS \$24,998

DESAL, C S. DEVELOPMENT OF IMPROVED PROCEDURES FOR SIMULATION OF EXCAVATION AND APPLICATION (CEE-8116950); 12 MONTHS \$34,999

DESAL, C S. INTERNATIONAL CONFERENCE ON CONSTITUTIVE LAWS FOR ENGINEERING MATERIALS: THEORY AND APPLICATION, JANUARY 10-14, 1983, TUCSON, ARIZONA (CEE-8202597*); 10 MONTHS \$10,678

CALIFORNIA

AGBAHIAN ASSOCIATES

SAFFORD, FREDERICK B. VALIDATION OF PULSE TECHNIQUES FOR THE ENVIRONMENTAL SIMULATION OF EARTHQUAKE MOTIONS IN CIVIL STRUCTURES (CEE-7715010 A02); 12 MONTHS \$46,725

MALTHAN, JAMES A. SEISMIC RESISTANCE OF BUILDINGS WITH SUSPENDED FLOORS (CEE-8006570 A01); 16 MONTHS \$149,128

HUNG, S J. SEISMIC ANALYSIS OF PORT AND HARBOR FACILITIES (CEE-8015337 A01); 12 MONTHS \$90,320

WERNER, STUART D. SEISMIC RESPONSE CHARACTERISTICS OF MELOLAND RD OVERPASS DURING 1979 IMPERIAL VALLEY EARTHQUAKE (CEE-8111964); 12 MONTHS \$130,801

APPLIED TECHNOLOGY COUNCIL

BOJAHN, CHRISTOPH. REDESIGN OF THREE MULTISTORY BUILDINGS USING ATC-3 TENTATIVE PROVISIONS (CEE-8116139); 12 MONTHS \$32,900

ASSOCIATION OF BAY AREA GOVERNMENTS

PERKINS, JEANNE B. EARTHQUAKE HAZARDS AND THE LIABILITY OF PRIVATE BUSINESSES AND INDUSTRIES (CEE-8209601); 18 MONTHS \$197,305

BUILDING SYSTEMS DEVELOPMENT INC

ARNOLD, CHRISTOPH. URBAN TECHNOLOGY OF EARTHQUAKE HAZARD REDUCTION: MODEL PLANNING DEVELOPMENT BASED ON A COMPARATIVE U.S. AND JAPANESE STUDY (CEE-8243128); 6 MONTHS \$92,821

CALIFORNIA INSTITUTE OF TECHNOLOGY

IWAN, WILFRED D. NATIONAL INFORMATION SERVICE FOR EARTHQUAKE ENGINEERING (CEE-7823889 A02); 12 MONTHS \$94,000

RAICHLIN, FREDRIC. THE KINEMATIC PROPERTIES OF BREAKING WAVES AND THEIR INTERACTION WITH BOTTOM PAVEMENTS (CEE-7912434 A02); 12 MONTHS \$103,070

BROOKS, NORMAN H. SEDIMENT TRANSPORT MECHANICS IN ALLUVIAL STREAMS (CEE-7920311 A02); 12 MONTHS \$98,556

IWAN, WILFRED D. PEOPLE'S REPUBLIC OF CHINA COOPERATIVE STRONG-MOTION ARRAY (CEE-8018271 A01); 12 MONTHS \$149,511

RAICHLIN, FREDRIC. A STUDY OF TSUNAMIS: THEIR COASTAL EFFECTS (CEE-8115457); 12 MONTHS \$74,876

LIST, E JOHN. MECHANICS OF TURBULENT BUOYANT PLUMES (CEE-8117272); 12 MONTHS \$126,988

JENNINGS, PAUL C. ANALYSIS OF GROUND-MOTION AND DYNAMIC STRUCTURAL RESPONSE DUE TO EARTHQUAKES (CEE-8119962); 12 MONTHS \$320,320

HELMBERGER, DONALD V. STRONG MOTION SEISMOLOGY (CEE-8121719); 12 MONTHS \$56,373

JENNINGS, PAUL C. AND HOUSNER, GEORGE W. UNITED STATES-PEOPLE'S REPUBLIC OF CHINA WORKSHOP ON EARTHQUAKE ENGINEERING RESEARCH BEIJING, CHINA-FALL, 1982 (CEE-8200293); 12 MONTHS \$23,841

CALIFORNIA POLYTECHNIC ST UNIV. SAN LUIS OBISPO

RIHAL, SATWANT S. DYNAMIC BEHAVIOR OF NON-STRUCTURAL BUILDING PARTITIONS AND CEILING SYSTEMS DURING EARTHQUAKES (CEE-8117965); 21 MONTHS \$156,243

DAMES & MOORE

ROTH, WOLFGANG H. AND KLEHN, HENRY. STABILITY OF EARTH STRUCTURES UNDER SEISMIC LOADING (CEE-7926691 A01); 12 MONTHS \$102,429

SCAWTHORN, CHARLES. A LOCATIONAL APPROACH TO SEISMIC RISK MITIGATION (CEE-8117905); 12 MONTHS \$127,307

EARTHQUAKE ENGINEERING RESEARCH INSTITUTE

DUKE, C M. MAXIMIZING THE LEARNING FROM DESTRUCTIVE EARTHQUAKES (CEE-7902990 A02); 12 MONTHS \$78,526

SCHOLL, ROGER E. EERI RESEARCH DISSEMINATION SEMINARS ON EARTHQUAKE ENGINEERING (CEE-8115351); 12 MONTHS \$36,130

SCHOLL, ROGER E. WORKSHOP FOR IDENTIFYING EXPERIMENTAL RESEARCH NEEDS FOR IMPROVING EARTHQUAKE RESISTANT DESIGN OF BUILDINGS (CEE-8200972); 12 MONTHS \$60,700

SCHOLL, ROGER E. A WORKSHOP ON NON-STRUCTURAL ISSUES OF SEISMIC DESIGN AND CONSTRUCTION (CEE-8203510); 12 MONTHS \$51,399

SCHOLL, ROGER E. WORKSHOP IN STRONG-GROUND MOTION SIMULATION AND ENGINEERING APPLICATIONS (EARTHQUAKE ENGINEERING) (CEE-8210465); 12 MONTHS \$20,845

PENZIE, JOSEPH. EIGHTH WORLD CONFERENCE ON EARTHQUAKE ENGINEERING; SAN FRANCISCO; JULY 21-28, 1984 (CEE-8211707); 24 MONTHS \$50,000

ENGINEERING COMPUTER CORPORATION

IMBSEN, ROY A. DEVELOPMENT AND IMPLEMENTATION OF A COMPUTERIZED LINEAR AND NONLINEAR SEISMIC DESIGN METHODOLOGY FOR BRIDGES (CEE-7919844 A01); 12 MONTHS \$131,838

EQE INC

YANEV, PETER I. AND FRAZIER, DOUGLAS O. DEVELOPMENT OF AN EARTHQUAKE LOSS-PREDICTION METHODOLOGY FOR HIGH-TECHNOLOGY INDUSTRIES (CEE-8207028*); 12 MONTHS \$56,424

H J DEGENKOLB ASSOCIATES ENGINEERS

WYLLIE, LORING A. REPAIR AND STRENGTHENING OF REINFORCED CONCRETE STRUCTURES (CEE-8201187); 12 MONTHS \$42,312

J H WIGGINS COMPANY

WIGGINS, JOHN H. EARTHQUAKE DAMAGEABILITY OF LOW-RISE CONSTRUCTION (CEE-8109607); 12 MONTHS \$114,548

JOHN A BLUME AND ASSOCIATES

NICOLETTI, JOSEPH P. REDESIGN OF A 10-STORY REINFORCED CONCRETE BUILDING USING ATC-3 TENTATIVE PROVISIONS (CEE-8210964); 12 MONTHS \$12,397

MELVYN GREEN & ASSOCIATES INC

GREEN, MELVYN. EVALUATION AND REATTACHMENT OF NON-STRUCTURAL ELEMENTS TO EXISTING BUILDINGS (CEE-8119880); 12 MONTHS \$54,380

MERRITT CASES INC

MERRITT, J L. SEISMIC TESTS OF BURIED LIFELINES AND INSTRUMENTATION/COMMUNICATION CONDUITS (EARTHQUAKE ENGINEERING) (CEE-8105791 A01); 12 MONTHS \$59,995

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION-AMES

RESEARCH CENTER

GIOVANNETTI, ANGELO. CENTRIFUGE FACILITY FOR RESEARCH IN GEOTECHNICAL ENGINEERING (CEE-7826122 A06*); 12 MONTHS \$284,186

NAVAL POSTGRADUATE SCHOOL

SARPKAYA, TURGUT. YAW AND CURRENT EFFECTS ON THE HYDRODYNAMIC RESISTANCE OF SMOOTH AND ROUGH CYLINDERS IN HARMONIC FLOW (CEE-8210248); 12 MONTHS \$43,000

RUHNAN, EVANS, RUHNAN, ASSOCIATES

MCGAVIN, GARY L. AND RUHNAN, HERMAN O. EARTHQUAKE HAZARD REDUCTION FOR LIFE SUPPORT EQUIPMENT IN HOSPITALS (CEE-8119926); 18 MONTHS \$105,062

S B BARNES & ASSOCIATES

PINKHAM, C W. REDESIGN OF AN 18-STORY STEEL BUILDING USING ATC-3 TENTATIVE PROVISIONS (CEE-8210966); 12 MONTHS \$34,151

SAN DIEGO STATE UNIVERSITY

PONCE, VICTOR M. OUTFLOW HYDROGRAPHS DURING EARTH DAM BREACHES (CEE-8025155 A01); 12 MONTHS \$48,879

SHARABI, M. RESEARCH INITIATION: BOND DEGRADATION EFFECT IN THE SEISMIC RESPONSE OF REINFORCED CONCRETE STRUCTURES (CEE-8208622); 24 MONTHS \$47,992

SCIENTIFIC SERVICE INC

REITHERMAN, ROBERT K. AND ZSUTTY, THEODORE C. CASE STUDIES OF THE EARTHQUAKE PERFORMANCE OF UNREINFORCED MASONRY BUILDINGS (CEE-8121899); 18 MONTHS \$175,975

SRI INTERNATIONAL

LINDBERG, H E. EXPERIMENTAL AND ANALYTICAL INVESTIGATION OF SOIL-STRUCTURE INTERACTION UNDER CONTAINED-EXPLOSION GROUND MOTION (EARTHQUAKE ENGINEERING) (CEE-8200321); 12 MONTHS \$308,556

STANFORD UNIVERSITY

FRANZINI, JOSEPH B. MIXING PROCESSES IN THE SIMULATION MODELING OF IRREGULARLY SHAPED WATER BODIES (CEE-7921324 A02); 12 MONTHS \$110,435

LECKIE, JAMES O. SOIL/FLY ASH LEACHATE INTERACTIONS: RELEASE TRANSPORT AND RETENTION OF TRACE ELEMENTS (CEE-8009028 A01); 12 MONTHS \$104,650

CLOUGH, G WAYNE. COLLABORATIVE RESEARCH: DETERMINATION OF SOIL PROPERTIES WITH THE SELF-BORING PRESSUREMETER (CEE-8011594 A01); 12 MONTHS \$57,179

DANTZIG, GEORGE B. AND MURRAY, WALTER. OPTIMIZATION OF LARGE-SCALE DYNAMIC SYSTEMS WITH SPECIAL REFERENCE TO

ENERGY AND WATER RESOURCES (ECS-8012974 A01*); 12 MONTHS \$85,000

SHAH, HARESH C; A GENERALIZED AND GLOBAL STUDY OF EARTHQUAKE DAMAGE AND INSURANCE RISK (CEE-8017533 A01); 1 MONTHS \$7,540

KRAWINKLER, HELMUT; U.S.-JAPAN COOPERATIVE EARTHQUAKE RESEARCH PROGRAM: SMALL-SCALE MODEL TESTS OF STRUCTURAL COMPONENTS AND ASSEMBLIES (EARTHQUAKE ENGINEERING) (CEE-8021119 A01); 12 MONTHS \$71,289

KIREMIDJIAN, ANNE S; NATURAL HAZARD RISK EVALUATION FOR MAJOR INDUSTRIAL FACILITIES (CEE-8116997); 24 MONTHS \$99,630

MCCARTY, PERRY L; FORMATION AND SIGNIFICANCE OF BROMINATED POLYETHOXY ALKYLPHENYL ETHERS FORMED DURING CHLORINATION OF WATER (CEE-8117561); 12 MONTHS \$111,435

PATE, M ELISABE; SEISMIC REGULATION FOR EXISTING BUILDINGS IN THE BOSTON AREA: ECONOMIC AND SAFETY ANALYSIS (CEE-8200025); 15 MONTHS \$32,339

CORNELL, C. ALLIN; MULTIPLE STOCHASTIC LOADS; EXTREMES AND OTHERS COMBINED EFFECTS (CIVIL ENGINEERING) (CEE-8203582); 12 MONTHS \$91,698

KAVAZANJIAN, EDWARD; COLLABORATIVE RESEARCH: TIME DEPENDENT BEHAVIOR OF EARTHWORKS FOUNDED ON COHESIVE SOILS (CEE-8204320); 12 MONTHS \$60,000

STRUCTURAL SOFTWARE DEVELOPMENT INC

SCHRICKER, VAHID; INELASTIC SEISMIC RESPONSE OF LOW-RISE PRECAST COUPLED-PANEL STRUCTURES (CEE-8205834); 18 MONTHS \$94,755

TETRA TECH INC

LEE, Y K; HYDRODYNAMIC EFFECTS OF STRONG EARTHQUAKE EXCITATION IN CONFINED AQUIFERS (CEE-8022337 A01); 12 MONTHS \$49,923

UNIVERSITY OF CALIFORNIA, BERKELEY

MCNIVEN, HUGH D; EARTHQUAKE ENGINEERING RESEARCH FACILITY SUPPORT (CEE-7721787 A03); 12 MONTHS \$58,610

BRILLINGER, DAVID R; THE EARTHQUAKE APPLICATIONS OF POINT PROCESS METHODOLOGY (CEE-7901642 A02); 12 MONTHS \$44,379

SACKMAN, JEROME L, AND KELLY, JAMES M; ANALYSIS OF INTERACTING EQUIPMENT - STRUCTURE SYSTEMS (CEE-7923651 A02); 12 MONTHS \$60,753

JENKINS, DAVID; USE OF SELECTIVE TOXICANTS FOR CONTROL OF ACTIVATED SLUDGE BULKING (CEE-8006295 A01); 12 MONTHS \$97,908

BERTERO, VITELMO V, AND CLOUGH, RAY W; U.S.-JAPAN COOPERATIVE EARTHQUAKE RESEARCH PROGRAM: EARTHQUAKE SIMULATOR TESTS OF A REINFORCED CONCRETE BUILDING (CEE-8009478 A02); 12 MONTHS \$41,535

GOLDSMITH, WERNER, AND CARROLL, MICHAEL M; ROCK MECHANICS OF EXCAVATION TOOLS AND BEHAVIOR OF FLUID-FILLED ROCKS UNDER IMPACT LOADING (CEE-8104715); 12 MONTHS \$42,555

CHOPRA, ANIL K; SEISMIC BEHAVIOR OF STRUCTURAL SYSTEMS: ANALYSIS AND DESIGN OF STRUCTURES (CEE-8105790 A01); 12 MONTHS \$33,479

POPOV, EGOR P, BERTERO, VITELMO V, AND MAHIN, STEPHEN A; SEISMIC BEHAVIOR OF STRUCTURAL COMPONENTS (CEE-8107217 A01); 12 MONTHS \$400,000

MCNIVEN, HUGH D; SEISMIC BEHAVIOR OF MASONRY (CEE-8107462 A01); 12 MONTHS \$115,000

CLOUGH, RAY W; SEISMIC BEHAVIOR OF COMPLETE STRUCTURAL SYSTEMS (CEE-8110050 A01); 12 MONTHS \$333,801

SEED, H B; INVESTIGATION OF SEISMIC RESPONSE AND FIELD PERFORMANCE OF PROTOTYPE EARTH DAMS (CEE-8110734); 24 MONTHS \$180,609

DAGANZO, CARLOS F; TRANSPORTATION ANALYSIS METHODS (CEE-8111681); 36 MONTHS \$153,992

GOODMAN, RICHARD E; THE EFFECT OF INITIAL STRESSES ON THE SAFETY OF UNDERGROUND EXCAVATIONS AGAINST WEDGE SLIDES AND ROCK FALLS (CEE-8113431); 12 MONTHS \$80,000

MONISMITH, CARL L; REFLECTION CRACKING IN OVERLAY PAVEMENT STRUCTURES (CEE-8119222); 12 MONTHS \$56,920

CHOPRA, ANIL K; EARTHQUAKE ANALYSIS AND DESIGN OF CONCRETE DAMS (CEE-8120308); 12 MONTHS \$60,805

HODGES, D A, AND OLDFHAM, WILLIAM G; ACQUISITION OF SPECIALIZED EQUIPMENT FOR MICROFABRICATION RESEARCH (OBS-8120447 A01*); \$5,300

BARLOW, RICHARD E, AND DER KIUREGHIAN, ARMEN; ANALYSIS OF LIFELINES SUBJECTED TO EARTHQUAKES (CEE-8120642); 12 MONTHS \$44,558

ARENS, EDWARD A; GENERATING SITE-SPECIFIC WEATHER DATA FOR SITING AND DESIGNING BUILDINGS (CEE-8202276); 12 MONTHS \$94,836

MITCHELL, JAMES K; COLLABORATIVE RESEARCH: TIME DEPENDENT BEHAVIOR OF EARTHWORKS FOUNDED ON COHESIVE SOILS (CEE-8203562); 12 MONTHS \$57,955

BOLT, BRUCE A; TAIWAN LARGE-SCALE STRONG-MOTION ARRAY PROJECT (EARTHQUAKE ENGINEERING) (CEE-8204672*); 12 MONTHS \$52,755

VAN INGEN, CATHARINE; RESEARCH INITIATION: MECHANICS OF SEDIMENT BED FORM (CIVIL ENGINEERING) (CEE-8205039); 24 MONTHS \$47,135

DER KIUREGHIAN, ARMEN, AND TAYLOR, K L; NUMERICAL METHODS FOR STRUCTURAL RELIABILITY (CEE-8205049*); 12 MONTHS \$59,101

SITAR, NICHOLAS; RESEARCH INITIATION: A STUDY OF DRAINED BEHAVIOR OF CEMENTED SANDS UNDER DYNAMIC LOADING (CEE-8205068); 24 MONTHS \$48,000

POPOV, EGOR P; UNITED STATES-JAPAN COOPERATIVE EARTHQUAKE RESEARCH PROGRAM - CYCLIC BEHAVIOR OF COMPOSITE FLOOR BEAMS (EARTHQUAKE ENGINEERING) (CEE-8207363); 15 MONTHS \$59,676

WANG, MARCY; UNITED STATES-JAPAN COOPERATIVE EARTHQUAKE RESEARCH PROGRAM - SEISMIC TESTING OF NONSTRUCTURAL COMPONENTS (EARTHQUAKE ENGINEERING) (CEE-8208012); 12 MONTHS \$36,000

MAHIN, STEPHEN A; UNITED STATES-JAPAN COOPERATIVE EARTHQUAKE RESEARCH PROGRAM - PSUEDO-DYNAMIC TESTING AND EVALUATION (EARTHQUAKE ENGINEERING) (CEE-8208079); 12 MONTHS \$79,804

BERTERO, VITELMO V, AND CLOUGH, RAY W; UNITED STATES-JAPAN COOPERATIVE EARTHQUAKE RESEARCH PROGRAM - EARTHQUAKE SIMULATOR TESTS OF A STEEL BUILDING MODEL (EARTHQUAKE ENGINEERING) (CEE-8208141); 12 MONTHS \$251,961

MCNIVEN, HUGH D; NATIONAL INFORMATION SERVICE FOR EARTHQUAKE ENGINEERING (CEE-8210196); 12 MONTHS \$372,555

GOODMAN, RICHARD E; 23RD U.S. SYMPOSIUM ON ROCK MECHANICS, BERKELEY, CA, AUGUST 25-27, 1982 (CEE-8210517); 3 MONTHS \$3,265

SITAR, NICHOLAS, AND BREKKE, TOR L; A WORKSHOP ON GOALS FOR BASIC RESEARCH IN ENGINEERING GEOLOGY; ST. HELENA, CA - JANUARY 21-22, 1983 (CEE-8216469); 9 MONTHS \$34,600

UNIVERSITY OF CALIFORNIA, DAVIS

CHENEY, JAMES A; CENTRIFUGE FACILITY FOR RESEARCH IN GEOTECHNICAL ENGINEERING (CEE-7813922 A04); 12 MONTHS \$135,536

SCHROEDER, EDWARD D; BIOLOGICAL DENITRIFICATION OF WASTEWATER (CIVIL ENGINEERING) (CEE-8200794); 12 MONTHS \$40,442

UNIVERSITY OF CALIFORNIA, IRVINE

HAROUN, MEDHAT A; RESEARCH INITIATION: DYNAMIC BEHAVIOR OF LIQUID STORAGE TANKS UNDER VERTICAL EARTHQUAKE EXCITATION (CEE-8204803); 24 MONTHS \$47,864

UNIVERSITY OF CALIFORNIA, LOS ANGELES

STENSTROM, MICHAEL K; OXYGEN LIMITED NITRIFICATION IN WASTEWATER TREATMENT (CEE-7911792 A02); 12 MONTHS \$40,437

KNOPOFF, LEON; STATISTICAL INVESTIGATION OF ENGINEERING SEISMOLOGY (CEE-8008588 A01); 12 MONTHS \$112,117

YEH, WILLIAM W; OPTIMIZATION OF REGIONAL WATER SUPPLIES FOR OPTIMAL PLANNING AND MANAGEMENT (CEE-8113500); 12 MONTHS \$50,000

REA, DIXON; EARTHQUAKE RESISTANCE OF STEEL STRUCTURES (CEE-8121691); 12 MONTHS \$28,246

SELNA, LAWRENCE G; SEISMIC TESTING OF FULL SCALE BOX GIRDER BRIDGE HINGE RESTRAINERS (CEE-8207543); 24 MONTHS \$118,000

UNIVERSITY OF CALIFORNIA, RIVERSIDE

SPOSITO, GARRISON; FUNDAMENTAL STUDIES ON SUBSURFACE TRANSPORT THEORY (CEE-7920778 A02); 12 MONTHS \$40,907

UNIVERSITY OF CALIFORNIA, SAN DIEGO

BRUNE, JAMES N, AND LUCO, JUAN E; NUMERICAL AND EXPERIMENTAL STUDY OF EARTHQUAKES AND EARTHQUAKE STRONG MOTION (CEE-8120096); 12 MONTHS \$162,493

UNIVERSITY OF REDLANDS

OLSON, RICHARD S; SEISMIC SAFETY AND PUBLIC POLICY PROCESSES: A STUDY OF THREE JURISDICTIONS IN SAN BERNARDINO COUNTY, CALIFORNIA (CEE-7923495 A01); 3 MONTHS \$35,320

NILSON, DOUGLAS C; A WORKSHOP ON HAZARDS RESEARCH, POLICY DEVELOPMENT, AND IMPLEMENTATION INCENTIVES: FOCUS ON URBAN EARTHQUAKES (CEE-8121146); 13 MONTHS \$35,300

UNIVERSITY OF SOUTHERN CALIFORNIA

TENG, TA-LIANG, AND TRIFUNAC, MIHAILO D; LOS ANGELES BASIN STRONG MOTION ACCELEROGRAPH NETWORK (CEE-8011543 A01); 12 MONTHS \$64,495

UDWADIA, F E; INVESTIGATION INTO THE USE OF SEISMIC TOMOGRAPHY FOR SITE CHARACTERIZATION (CEE-8110774); 12 MONTHS \$54,997

DRAVINSKI, M; STRONG MOTION EFFECTS DUE TO SEISMIC WAVES IN DIPPING LAYERS (CEE-8119696); 12 MONTHS \$39,297

HUDSON, DONALD E; SUPPORT FOR THE INTERNATIONAL ASSOCIATION FOR EARTHQUAKE ENGINEERING (CEE-8119736); 36 MONTHS \$29,899

HUDSON, DONALD E; GOLDEN ANNIVERSARY WORKSHOP ON STRONG MOTION SEISMOMETRY (CEE-8200565); 12 MONTHS \$28,337

WILLIAM SPANGLE AND ASSOCIATES

SPANGLE, WILLIAM E; PRE-EARTHQUAKE PLANNING FOR POST-EARTHQUAKE REBUILDING (CEE-8024724 A01); 12 MONTHS \$193,255

BLAIR, MARTHA L; PLANNING AND ENGINEERING RESPONSE TO LANDSLIDES (CEE-8209252); 12 MONTHS \$74,931

WISS JANNEY ELSTNER AND ASSOCIATES INC

HANSON, JOHN M; METHODOLOGY FOR DAMAGE ASSESSMENT OF EXISTING STRUCTURES (CEE-8117566); 12 MONTHS \$25,248

COLORADO

ATKINSON-NOLAND AND ASSOCIATES INC

NOLAND, JAMES L, AND ATKINSON, RICHARD H; BASIC PROPERTIES OF CLAY-UNIT MASONRY (CEE-8115002); 12 MONTHS \$51,476

COLORADO SCHOOL OF MINES

CLARK, GEORGE B. WORKSHOP ON HIGH GRAVITY CENTRIFUGE SIMULATION FOR RESEARCH IN ROCK MECHANICS, GOLDEN, COLORADO, MAY 1982 (CEE-8115024); 10 MONTHS \$20,000

COLORADO STATE UNIVERSITY

SHEN, HSIEH W. THE PHYSICAL BASIS OF SURFACE WATER HYDROLOGY WITH EMPHASIS ON HILLSLOPE HYDROLOGY AND DRAINAGE NETWORK DEVELOPMENTS (INT-8021913 A01*); 12 MONTHS \$20,148

SALAS, JOSE D. AND BOES, DUANE C. STOCHASTIC MODELING OF GEOPHYSICAL TIME SERIES (CEE-8110782); 12 MONTHS \$62,265

BODIG, JOZSEF. ENGINEERING RESEARCH EQUIPMENT (CEE-8114993); 12 MONTHS \$24,773

WARD, ROBERT C. AND MORRISON, SUMNER N. WORKSHOP ON RESEARCH NEEDS RELATING TO SOIL ABSORPTION ON WASTEWATER (FORT COLLINS) (CEE-8213092); 12 MONTHS \$28,171

RESEARCH INSTITUTE OF COLORADO (RIC)

WEDDING, JAMES B. EXPERIMENTAL DETERMINATION AND NUMERICAL PREDICTION OF SPATIAL CONCENTRATION DIFFUSION AND DEPOSITION OF HEAVY PARTICLES IN THE ATMOSPHERE (CEE-8023266 A01); 12 MONTHS \$62,425

UNIVERSITY OF COLORADO AT BOULDER

SATHER, DUANE P. APPLICATIONS OF PARTIAL DIFFERENTIAL EQUATIONS AND GROUP REPRESENTATIONS TO NONLINEAR SHELL THEORY (MCS-7923650 A02*); 12 MONTHS \$7,446

STURE, STEIN, AND KO, HON-YIM. EXPERIMENTAL AND ANALYTICAL VALIDATION OF CONSTITUTIVE MODELS FOR SOILS (CEE-8025806 A01); 12 MONTHS \$67,785

WHITE, GILBERT F. A CLEARINGHOUSE ON NATURAL HAZARDS RESEARCH AND APPLICATIONS (29E-8107283 A01); 12 MONTHS \$98,039

FENG, CHUAN C. AND ABRAMS, DANIEL P. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH PROJECT: BASIC PROPERTIES OF CLAY-UNIT MASONRY (CEE-8115005); 12 MONTHS \$58,242

SCHIFFMAN, ROBERT L. NONMONOTONIC CONSOLIDATION OF SOIL (INT-8115615*); 24 MONTHS \$7,000

ABRAMS, DANIEL P. USE OF REDUCED-SCALE MODELS TO PREDICT DYNAMIC RESPONSE OF CONCRETE STRUCTURES (CEE-8119385*); 24 MONTHS \$146,846

DATTA, SUBHENDU K. RESPONSE OF BURIED PIPELINES TO SEISMIC WAVES (CEE-8120536); 12 MONTHS \$53,431

SCHIFFMAN, ROBERT L. AND KO, HON-YIM. FINITE STRAIN CONSOLIDATION OF THICK SOIL DEPOSITS (CEE-8200950); 12 MONTHS \$33,000

PALM, RISA. THE RESPONSE OF HOME MORTGAGE LENDERS TO EARTHQUAKE HAZARDS INFORMATION (CEE-8204664); 18 MONTHS \$95,431

UNIVERSITY OF DENVER

DRABEK, THOMAS E. MANAGERIAL STRATEGIES IN LOCAL EMERGENCY PREPAREDNESS AGENCIES (CEE-8206065); 12 MONTHS \$111,785

CONNECTICUT**UNIVERSITY OF CONNECTICUT**

FRANTZ, GREGORY C. SHEAR STRENGTH OF HIGH STRENGTH CONCRETE (CEE-8119386); 24 MONTHS \$86,173

DEMARS, KENNETH R. EFFECTIVE STRESS STATE AND STABILITY OF GRANULAR BEDS SUBJECTED TO WAVE PRESSURES. (CIVIL ENGINEERING) (CEE-8204395); 12 MONTHS \$18,143

DELAWARE**UNIVERSITY OF DELAWARE-COLLEGE OF MARINE STUDIES**

GARVINE, RICHARD W. THEORETICAL DYNAMICS OF BUOYANT PLUMES IN COASTAL WATERS (OCE-8110383*); 12 MONTHS \$21,885

UNIVERSITY OF DELAWARE

HUANG, CHIN-PAO. CHEMICAL INTERACTIONS BETWEEN COMPLEXED HEAVY METALS AND HYDROUS SOLIDS. THE EFFECTS OF COMPLEX FORMATION ON INTERFACIAL REACTIONS (CEE-8104728); 24 MONTHS \$103,744

DEAN, ROBERT G. AND DALRYMPLE, ROBERT A. NEARSHORE CIRCULATION AND COASTAL PROCESSES: EFFECTS OF DIRECTIONAL WAVES (CEE-8114826); 12 MONTHS \$85,444

YANG, CHENG Y. RANDOM VIBRATION OF CONCRETE GRAVITY DAM-RESERVOIR SYSTEMS DURING EARTHQUAKES (EARTHQUAKE ENGINEERING) (CEE-8208840); 15 MONTHS \$75,199

DISTRICT OF COLUMBIA**COURTESY TRAVEL SERVICE**

LYNCH, LOUISE. TRAVEL AND ADMINISTRATIVE SERVICES IN SUPPORT OF INTERNATIONAL SCIENCE ACTIVITIES SPONSORED BY THE NATIONAL SCIENCE FOUNDATION (08T-8018782 A06*); 12 MONTHS \$40,000

LYNCH, LOUISE. TRAVEL AND ADMINISTRATIVE SERVICES IN SUPPORT OF INTERNATIONAL SCIENCE ACTIVITIES SPONSORED BY THE NATIONAL SCIENCE FOUNDATION (02T-8018782 A08*); \$12,000

LYNCH, LOUISE. TRAVEL AND ADMINISTRATIVE SERVICES IN SUPPORT OF INTERNATIONAL SCIENCE ACTIVITIES SPONSORED BY THE NATIONAL SCIENCE FOUNDATION (29T-8018782 A12*); 8 MONTHS \$50,000

DEPARTMENT OF INTERIOR

WOODBURY, FRANKLIN W. CONTINUING ACTIVITIES OF THE U.S. NATIONAL COMMITTEE FOR ROCK MECHANICS (CEE-8119409); 12 MONTHS \$10,000

WOODBURY, FRANKLIN W. CONTINUING SUPPORT OF THE U.S. NATIONAL COMMITTEE ON TUNNELING TECHNOLOGY (CEE-8203257*); 12 MONTHS \$15,500

GEORGE WASHINGTON UNIVERSITY

YEVJEVICH, VUJICA M. STOCHASTIC WATER STORAGE THEORY (CEE-7916317 A02); 12 MONTHS \$110,000

MAHMOOD, KHALID, AND TARAR, RIAZ N. SFC AWARD (PAKISTAN CURRENCY & U.S. DOLLARS) FOR PROTOTYPE RESEARCH ON ALLUVIAL CHANNELS IN IRRIGATION CANALS AND MEDIUM SIZE RIVERS (INT-8009474 A02*); \$122,756

NOOR, AHMED K. SYMPOSIUM ON ADVANCES AND TRENDS IN STRUCTURAL AND SOLID MECHANICS, OCTOBER 4-7, 1982 (CEE-8115486); 13 MONTHS \$6,548

YEVJEVICH, VUJICA M. VALIDITY RANGE OF NEW FREE-SURFACE UNSTEADY FLOW EQUATIONS WITH BOTTOM CURVATURES (CEE-8210783); 12 MONTHS \$25,005

NATIONAL ACADEMY OF SCIENCES

ISRAELEN, O. ALLEN. POST-EVENT INVESTIGATIONS TO MAXIMIZE LEARNING FROM DESTRUCTIVE NATURAL DISASTERS (CEE-7810631 A02); 12 MONTHS \$158,286

PRINDLE, WILLIAM R. SYMPOSIUM ON THE CONSERVATION OF HISTORIC STONE BUILDINGS AND MONUMENTS (29E-8015683 A03); 6 MONTHS \$3,000

EBERHARD, JOHN P. CONTINUATION OF THE FEDERAL CONSTRUCTION COUNCIL (CEE-8306605); 12 MONTHS \$10,000

EBERHARD, JOHN P. U.S. NATIONAL COMMITTEE FOR THE INTERNATIONAL COUNCIL FOR BUILDING RESEARCH, STUDIES, AND DOCUMENTATION (USNCCIB) (CEE-8210543); 12 MONTHS \$10,000

EBERHARD, JOHN P. SUPPORT OF A BUILT ENVIRONMENTAL WORKSHOP ON BUILDING DIAGNOSTICS (CEE-8213651); 12 MONTHS \$28,980

PARKER, STEPHEN D. CONFERENCE ON BARRIERS TO EFFICIENT MANAGEMENT OF URBAN WATER SUPPLIES, FALL 1982, WASHINGTON, D.C. (29E-8216563); 12 MONTHS \$10,000

GOSLIN, DAVID A. SYMPOSIUM ON THE ADEQUACY AND MAINTENANCE OF URBAN PUBLIC FACILITIES (CEE-8216581); 12 MONTHS \$30,000

NATIONAL ACADEMY OF SCIENCES-NATIONAL RESEARCH COUNCIL

STEVEY, H. G. AND HADDAD, TERRIER A. PERFORM A STUDY OF EDUCATION AND UTILIZATION OF THE ENGINEER 1980-2000: STATUS, NEEDS, AND OPPORTUNITIES, PHASE TWO (ENG-8212257*); 12 MONTHS \$120,268

THE CASE STUDY INSTITUTE

YIN, ROBERT K. UTILIZATION OF NATURAL HAZARDS RESEARCH (CEE-8203884); 24 MONTHS \$158,004

FLORIDA**TRAVEL AWARD**

PARTHENIADES, EMMANUEL. TRAVEL TO ATTEND: 18TH INTERNATIONAL CONFERENCE ON COASTAL ENGINEERING, CAPE TOWN, SOUTH AFRICA, NOVEMBER 10-19, 1982 (CEE-8211607); 1 MONTHS \$2,397

UNIVERSITY OF FLORIDA

DAVIDSON, JOHN L. AND SCHMERTMANN, JOHN H. THE QUASI-PRECONSOLIDATION EFFECT IN CLAYS AND ITS ROLE IN SOIL-STRUCTURE INTERACTION (CEE-8116906); 12 MONTHS \$29,061

UNIVERSITY OF MIAMI-SCHOOL OF MARINE & ATMOSPHERIC SCIENCES

LE MEHAUTE, BERNARD. ESTABLISHMENT OF MATHEMATICAL MODELING OF SHORELINE EVOLUTION (CEE-7911930 A03); 12 MONTHS \$44,577

WANG, JOHN D. THE NEARSHORE EFFECTS OF TSUNAMIS ON STRUCTURES (CEE-8106624); 12 MONTHS \$60,711

YAMAMOTO, TOKUO. WAVE INDUCED PRESSURE AND STRESS INSTABILITIES IN SEABEDS (CEE-8117454); 12 MONTHS \$85,000

UNIVERSITY OF MIAMI

VEZIROGLU, T. NEJAT. MULTI-PHASE FLOW AND HEAT TRANSFER SYMPOSIUM - WORKSHOP, APRIL 18-20, 1983 - MIAMI, FLORIDA (MEA-8207453*); 19 MONTHS \$2,000

UNIVERSITY OF SOUTH FLORIDA

ALI, ELFATH M. RESEARCH INITIATION: THE USE OF FUZZY SET SYSTEMS IN THE SAFETY EVALUATION OF DAMS (CEE-8204643); 24 MONTHS \$47,634

GEORGIA**GEORGIA INSTITUTE OF TECHNOLOGY MAIN CAMPUS**

BACHUS, ROBERT C. COLLABORATIVE RESEARCH: DETERMINATION OF SOIL PROPERTIES WITH THE SELF-BORING PRESSUREMETER (CEE-8012960 A01); 12 MONTHS \$24,251

HALDAR, ACHINTYA. PROBABILISTIC EVALUATION OF DAMAGE POTENTIAL IN EARTHQUAKE-INDUCED LIQUEFACTION IN A 3-D SOIL DEPOSIT (CEE-8111691); 12 MONTHS \$31,699

SIMITSES, GEORGE J. NONLINEAR STABILITY ANALYSIS OF ELASTIC UNBRACED FRAMES (CEE-8117450 A01); 12 MONTHS \$52,378

MARTIN, RICHARD L. DEVELOPMENT OF STRATEGIES FOR MITIGATING EARTHQUAKE HAZARDS TO EXISTING STRUCTURES IN THE SOUTHEASTERN UNITED STATES (CEE-8121821); 12 MONTHS \$91,239

HAWAII**UNIVERSITY OF HAWAII-MANOA**

LEE, THEODORE T. SHALLOW WATER OCEAN ENGINEERING RESEARCH WORKSHOP (CEE-8116837); 12 MONTHS \$34,000

LEE, THEODORE T. SHALLOW WATER OCEAN ENGINEERING RESEARCH WORKSHOP (CEE-8116837 A01); 4 MONTHS \$3,100

- CHIU, ARTHUR N; RISK ANALYSIS FOR NATURAL HAZARDS DAMAGE MITIGATION (CEE-8119124); 12 MONTHS \$83,000
- LOOMIS, HAROLD G; STUDY OF TSUNAMI TERMINAL EFFECTS (CEE-8120160); 12 MONTHS \$45,865
- MOORE, DENNIS W; METHODOLOGIES FOR COLLECTION AND DISSEMINATION OF TSUNAMI DATA - EARTHQUAKE ENGINEERING (CEE-8203394); 6 MONTHS \$21,872

IDAHO

UNIVERSITY OF IDAHO

- SACK, RONALD L; COLLABORATIVE RESEARCH: SNOW LOADS ON STRUCTURES. A FACTOR IN SEISMIC RESPONSE (CEE-8109747*); 12 MONTHS \$47,890

ILLINOIS

AMERICAN PLANNING ASSOCIATION

- THUROW, CHARLES; EARTHQUAKE HAZARD MITIGATION THROUGH LAND USE MANAGEMENT: A GUIDE FOR PLANNERS AND PUBLIC OFFICIALS (CEE-7915290 A03); 5 MONTHS \$8,313

ILLINOIS INSTITUTE OF TECHNOLOGY

- MALKUS, DAVID S; FINITE ELEMENTS WITH PENALTIES FOR INCOMPRESSIBLE ELASTICITY (CEE-8017549 A01); 12 MONTHS \$37,203

NORTHWESTERN UNIVERSITY

- NEMAT-NASSER, S; COLLABORATIVE RESEARCH: MICROMECHANICAL MODELING OF GRANULAR SOIL BEHAVIOR (CEE-8007764 A01); 12 MONTHS \$47,218

- BAZANT, ZDENEK P; INELASTICITY AND FAILURE OF CONCRETE (CEE-8009650 A01); 12 MONTHS \$146,448

- KRIZEK, RAYMOND J; BASIC PROPERTIES AND INTERACTIVE ROLES OF CONSTITUENTS IN CHEMICALLY GROUTED SOILS (CEE-8025163 A01); 12 MONTHS \$53,586

- SHAH, SURENDRA P; CYCLIC STRESS-STRAIN CURVES FOR CONFINED CONCRETE (CEE-8120774); 24 MONTHS \$107,250

- SHAH, SURENDRA P; FRACTURE PROCESS ZONE AND R-CURVES FOR CEMENTITIOUS COMPOSITES (STRUCTURAL MECHANICS) (CEE-8203100); 12 MONTHS \$68,348

- PARMELEE, RICHARD A, AND BELYTSCHKO, THEODORE B; THREE DIMENSIONAL COMPUTATIONAL STUDIES OF SOIL-STRUCTURE INTERACTION (CEE-8207492); 24 MONTHS \$78,937

- LIU, WING KAM, AND BELYTSCHKO, THEODORE B; STABILITY AND IMPROVEMENT OF EXPLICIT TIME INTEGRATION PROCEDURES FOR STRUCTURAL DYNAMICS (CEE-8211862); 12 MONTHS \$59,884

UNIVERSITY OF ILLINOIS AT CHICAGO CIRCLE

- SILVER, MARSHALL L; COLLABORATIVE RESEARCH: MICROMECHANICAL MODELING OF GRANULAR SOIL BEHAVIOR (CEE-8008828 A01); 12 MONTHS \$46,100

- KRAJCNIVIC, DUSAN; A CONTINUUM THEORY OF ROCK DAMAGE AND FRACTURE (CEE-8105270); 12 MONTHS \$47,492

- MASUR, E F; NON-STATIONARY SOLUTIONS TO STRUCTURAL OPTIMIZATION PROBLEMS (CEE-8110784); 24 MONTHS \$95,158

- ROUPHAIL, NAGUI M; RESEARCH INITIATION: CAPACITY ANALYSIS AT FREEWAY CONSTRUCTION LANE CLOSURES (CEE-8204814); 24 MONTHS \$47,912

UNIVERSITY OF ILLINOIS AT URBANA

- ANG, A H; PROBABILISTIC DESIGN OF EARTHQUAKE RESISTANT STRUCTURES/PRC COOPERATIVE RESEARCH (CEE-8019624 A01); 12 MONTHS \$46,125

- LIN, Y K; DYNAMIC RESPONSE ANALYSIS OF COMPLEX THIN SHELL STRUCTURES (CEE-8024882 A01); 12 MONTHS \$32,246

- SNOEYINK, VERNON L; EFFECTS OF ACTIVATED CARBON ON REACTIONS OF CHLORINE-CONTAINING DISINFECTANTS WITH ORGANIC COMPOUNDS (CEE-8110024); 12 MONTHS \$88,288

- SOZEN, METE A; EARTHQUAKE RESPONSE OF REINFORCED CONCRETE FRAMES (CEE-8114977); 12 MONTHS \$153,900

- FISK, CAROLINE S; THEORY AND SOLUTION ALGORITHMS FOR GENERAL NETWORK EQUILIBRIUM MODELS (CEE-8119778); 12 MONTHS \$38,319

- LIN, Y K; RANDOM RESPONSE OF TURBINE STRUCTURES UNDER SEISMIC EXCITATION (CEE-8120438); 12 MONTHS \$62,945

- HALL, WILLIAM J; DESIGN STUDIES IN EARTHQUAKE ENGINEERING (CEE-8203973); 12 MONTHS \$102,170

- IBBS, CHARLES W; RESEARCH INITIATION: EFFECTIVE PROCEDURES FOR ENGINEERING SPECIFICATION OF WATER AND WASTEWATER TREATMENT PROCESSES (CEE-8204431); 24 MONTHS \$48,000

- VALOCCHI, ALBERT J; RESEARCH INITIATION: VALIDITY OF THE LOCAL CHEMICAL EQUILIBRIUM ASSUMPTION FOR MODELING SOLUTE TRANSPORT THROUGH HETEROGENEOUS AQUIFERS (CEE-8204434); 24 MONTHS \$48,000

- ALAVIAN, VAHID; RESEARCH INITIATION: THREE-DIMENSIONAL DENSITY CURRENTS ON A SLOPING SURFACE (CEE-8204435); 24 MONTHS \$48,000

- POUTCH, DOUGLAS A; UNITED STATES-JAPAN COOPERATIVE EARTHQUAKE PROGRAM-SEISMIC TESTS OF A FULL-SCALE STEEL BUILDING AT TSUKUBA, JAPAN (EARTHQUAKE ENGINEERING) (CEE-8206920*); 12 MONTHS \$57,246

- WEN, Y K; RELIABILITY AND RISK-BASED DESIGN OF STRUCTURES UNDER MULTIPLE HAZARDS (CEE-8207590); 12 MONTHS \$49,375

INDIANA

PURDUE UNIVERSITY

- YAO, JAMES T; CONTROL AND RELIABILITY OF CIVIL ENGINEERING STRUCTURES (CEE-8018963 A01); 12 MONTHS \$65,358

- YANG, HENRY Y; DYNAMIC RESPONSE ANALYSIS OF COMPLEX THIN SHELL STRUCTURES (CEE-8024883 A01); 12 MONTHS \$77,467

- YAO, JAMES T, AND FU, KING-SUN; METHODOLOGY FOR DAMAGE ASSESSMENT OF EXISTING STRUCTURES (CEE-8117678); 12 MONTHS \$143,065

- KROUSGRILL, CHARLES M; RESEARCH INITIATION: A NEW TECHNIQUE FOR THE NONLINEAR SEISMIC ANALYSIS OF STRUCTURAL ELEMENTS (CEE-8204237); 24 MONTHS \$48,000

- CHEN, WAI F; THREE-DIMENSIONAL ELASTIC-PLASTIC-FRACTURE ANALYSIS FOR CONCRETE STRUCTURES (CEE-8209626); 24 MONTHS \$73,176

- LEONARDS, GERALD A; PREDICTING LIQUEFACTION POTENTIAL OF INSITU SAND DEPOSITS DURING EARTHQUAKES (CEE-8211482); 24 MONTHS \$199,967

UNIVERSITY OF NOTRE DAME

- NEE, VICTOR W; FLUID-STRUCTURE INTERACTION DURING EARTHQUAKE (CEE-8104431 A01); 12 MONTHS \$40,000

- IRVINE, ROBERT L, KULPA, C F, AND WOLF, EDUARDO E; STRUCTURED MODELS FOR BIOLOGICAL WASTE TREATMENT SYSTEMS (CEE-8112530); 12 MONTHS \$143,849

- YANG, KWANG-TZU, AND LLOYD, JOHN R; NATURAL CONVECTION WORKSHOP - BRECKENRIDGE, COLORADO, JULY 18-21, 1982 (MEA-8208948*); 8 MONTHS \$2,000

- KIRKNER, DAVID J, KATONA, MICHAEL G, AND BANG, SANGCHUL; ENGINEERING RESEARCH EQUIPMENT: SOIL-STRUCTURE TEST FACILITY (CEE-8208959); 12 MONTHS \$38,360

IOWA

IOWA STATE UNIVERSITY OF SCIENCE & TECHNOLOGY

- HANDY, RICHARD L; MECHANICS AND DISTRIBUTION OF LIQUID SILT (CEE-8020345 A01); 12 MONTHS \$44,646

UNIVERSITY OF IOWA

- HAUG, EDWARD J; OPTIMAL DESIGN OF DISTRIBUTED PARAMETER STRUCTURES (CEE-8005677 A02); 12 MONTHS \$71,419

- ARORA, JASBIR S; EFFICIENT METHODS FOR OPTIMAL DESIGN OF LARGE COMPLEX STRUCTURAL SYSTEMS (CEE-8008102 A01); 12 MONTHS \$41,024

- CHWANG, ALLEN T; NONLINEAR HYDRODYNAMIC PRESSURES ON DAMS DURING EARTHQUAKE (CEE-8020564 A01); 9 MONTHS \$44,391

- KENNEDY, JOHN F, AND JAIN, SUBHASH C; CHARACTERISTIC TIMES AND RATES OF NONEQUILIBRIUM RIVER PROCESSES (CEE-8023003 A01); 12 MONTHS \$60,000

- KENNEDY, JOHN F, AND TATINCLAUX, JEAN-CLAU; THE FORMATION AND MECHANICAL PROPERTIES OF NATURALLY OCCURRING ICE SYSTEMS WITHIN THE CONTEXT OF CIVIL ENGINEERING INTERESTS (CEE-8109252*); 12 MONTHS \$52,656

- KENNEDY, JOHN F; REFRIGERATION COMPONENTS TO EQUIP A NEW WIND TUNNEL FOR BASIC RESEARCH ON ICE MECHANICS, ICING PROCESSES, AND ICELOADED STRUCTURES (CEE-8205653*); 12 MONTHS \$28,713

KANSAS

UNIVERSITY OF KANSAS MAIN CAMPUS

- DARWIN, DAVID; ROLE OF CEMENT PASTE IN DEFORMATION AND CRACKING OF PLAIN CONCRETE (CEE-8116349); 24 MONTHS \$101,399

KENTUCKY

UNIVERSITY OF KENTUCKY

- RIZZO, FRANK J, AND SHIPPY, D J; BOUNDARY INTEGRAL EQUATION ANALYSIS FOR A CLASS OF EARTH-STRUCTURE INTERACTION PROBLEMS (CEE-8013461 A01); 12 MONTHS \$46,507

LOUISIANA

LOUISIANA STATE UNIVERSITY, BATON ROUGE

- TUMAY, MEHMET T, JURAN, ILAN, AND OLIVER, CHARLES D; INDUSTRY/UNIVERSITY CO-OPERATIVE: FUNDAMENTAL ASPECTS OF THE PENETRATION MECHANISM IN SOFT SOILS (CEE-8113679); 12 MONTHS \$90,697

- SINGH, VIJAY P; FREE BOUNDARY PROBLEMS IN WATER RESOURCE ENGINEERING (CEE-8119878); 4 MONTHS \$10,755

TRAVEL AWARD

- TUMAY, MEHMET T; INTERNATIONAL TRAVEL: ESOPT II (EUROPEAN SYMPOSIUM ON PENETRATION TESTING), AMSTERDAM, THE NETHERLANDS, MAY 24-27, 1982 (CEE-8211096); 6 MONTHS \$900

MARYLAND

CAPITAL SYSTEMS GROUP INC

- CLANSKY, KENNETH B; SUPPORT SERVICES FOR RESEARCH INFORMATION PROCESSING DISSEMINATION PROGRAMS (08G-8020049 A02*); 12 MONTHS \$35,040

JOHNS HOPKINS UNIVERSITY

- O'MELIA, CHARLES R; COAGULATION OF SUSPENDED PARTICLES IN LAKES (CEE-8121501); 12 MONTHS \$95,696

COROTIS, ROSS B. STATISTICAL DURATION - INTENSITY MODEL OF STRUCTURAL FLOOR LOADS (CEE-8205384; 12 MONTHS \$61,934)

MARTIN MARIETTA CORPORATION-MARTIN MARIETTA LABORATORY
SKALNY, JAN P. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: FORMATION AND REACTIVITY OF TRICALCIUM SILICATE AND DICALCIUM SILICATE (CEE-7902665 A02*; 12 MONTHS \$42,477)

NATIONAL BUREAU OF STANDARDS

LEYENDECKER, EDGAR V. STONE, WILLIAM, AND WOODWARD, KYLE. LARGE-SCALE BRIDGE COLUMNS SUBJECTED TO REVERSED CYCLIC LOADING (29E-8119415; 12 MONTHS \$148,365)

UNIVERSITY OF MARYLAND, COLLEGE PARK

COLVILLE, JAMES. THE SECOND NORTH AMERICAN MASONRY CONFERENCE. AUGUST 9-11, 1982. COLLEGE PARK, MARYLAND (CEE-8120545; 12 MONTHS \$18,780)

VANNON, DONALD W. PROTOTYPE ARCHITECTURE AND ENGINEERING PERFORMANCE INFORMATION CENTER (CEE-8121216; 12 MONTHS \$73,839)

MASSACHUSETTS

CLARK UNIVERSITY

WEINROBE, MAURICE. MORTGAGE DEFAULT RISKS ASSOCIATED WITH EARTHQUAKES: AN ANALYSIS BASED ON THE 1971 SAN FERNANDO EARTHQUAKE (CEE-8207851; 16 MONTHS \$132,106)

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

WHITMAN, ROBERT V. MODELING DYNAMIC GROUND SHAKING BY CENTRIFUGE (CEE-7901815 A02*; 5 MONTHS \$15,829)

LANDAHL, MARTEN T. AND WIDNALL, SHEILA E. THE ROLE OF SMALL SCALES IN THE GENERATION OF WATER WAVES BY WIND (CEE-7912132 A02; 12 MONTHS \$72,908)

MEI, CHIANG C. DYNAMIC MECHANICAL RESPONSE OF SATURATED POROUS MEDIA IN GEOMECHANICS (CEE-7921993 A02*; 12 MONTHS \$52,778)

LADD, CHARLES C. STRESS-STRAIN ANISOTROPY OF SOILS UNDER GENERALIZED STATES OF STRESS (CEE-8103635 A01; 12 MONTHS \$56,837)
KRZYSZTOFOWICZ, ROMAN. A METHODOLOGICAL FOUNDATION FOR PERFORMANCE AND ACCOUNTABILITY EVALUATIONS OF WATER RESOURCE SYSTEMS (CEE-8107304; 12 MONTHS \$94,480)

HEMOND, HAROLD F. MICROBIAL PRODUCTION OF NITROUS OXIDE IN NITROGEN-RICH RIVER SEDIMENTS (CEE-8108184; 24 MONTHS \$116,457)

BALIGH, MOHSEN M. AZZOUZ, AMR S. AND LADD, CHARLES C. NON-LINEAR CONSOLIDATION ANALYSES AROUND PILE SHAFTS (CEE-8110003; 12 MONTHS \$62,870)

FARDIS, MICHAEL N. CYCLIC MULTIAXIAL MODEL OF PLAIN CONCRETE & APPLICATION TO REINFORCED CONCRETE MEMBERS (CEE-8116832; 12 MONTHS \$42,601)

SHEFFL, YOSEF. COMPARATIVE TESTS AND VALIDATIONS OF EQUILIBRIUM ASSIGNMENT METHODS IN TRANSPORTATION SYSTEMS ANALYSIS (CIVIL ENGINEERING) (CEE-8119004; 12 MONTHS \$60,954)

CLEARY, MICHAEL P. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH: THEORETICAL AND LABORATORY SIMULATION OF UNDERGROUND FRACTURING OPERATIONS (CEE-8119364; 12 MONTHS \$60,000)

HARLEMAN, DONALD R. TURBULENT MIXING AND ENTRAINMENT IN DOUBLY DIFFUSIVE SYSTEMS (CEE-8119384; 12 MONTHS \$74,000)

AKI, KEIITI. SEISMOLOGICAL STUDIES FOR THE PREDICTION OF EARTHQUAKE STRONG MOTION (CEE-8206456; 12 MONTHS \$89,790)

KAUSEL, EDUARDO. PILE-SUPPORTED EMBEDDED STRUCTURES (CEE-8209407; 12 MONTHS \$66,284)

KAUSEL, EDUARDO, AND VANMARCKE, ERIK H. IMPROVED GROUND MOTION FOR SEISMIC DESIGN (EARTHQUAKE ENGINEERING) (CEE-8211021; 24 MONTHS \$92,460)

CONNOR, JEROME J. BOSS '82. THIRD INTERNATIONAL CONFERENCE ON BEHAVIOR OF OFFSHORE STRUCTURES. M.I.T., CAMBRIDGE, MASS. AUGUST 2-5, 1982 (CEE-8211967*; 2 MONTHS \$10,000)

NORTHEASTERN UNIVERSITY

COHEN, MENASHI D. RESEARCH INITIATION: MICROMECHANICAL MODELLING OF THE EXPANSIVE MECHANISM IN EXPANSIVE CEMENT CONCRETE (CEE-8205243; 24 MONTHS \$47,675)

TRAVEL AWARD

SHANAHAN, PETER. TRAVEL TO ATTEND EUTROPHICATION OF SHALLOW LAKES: MODELING, MONITORING AND MANAGEMENT. VESZPREM, HUNGARY, AUGUST 29-SEPTEMBER 3, 1982 (CEE-8211722; 6 MONTHS \$801)

SELIG, ERNEST T. INTERNATIONAL TRAVEL: INVITED LECTURES AT MOSCOW STATE UNIVERSITY IN FALL 1982 ON U.S. ENGINEERING SOIL INVESTIGATIVE INSTRUMENTATION AND TECHNIQUES (CEE-8216264; \$1,400)

UNIVERSITY OF MASSACHUSETTS, AMHERST

HILLEL, DANIEL I. AND BERGER, BERNARD B. FIELD TESTING OF MATHEMATICAL MODELS DESCRIBING SOIL-WATERSOLUTE DYNAMICS (CEE-8105807; 24 MONTHS \$167,333)

KNIGHTLY, GEORGE H. SOME NONLINEAR MATHEMATICAL PROBLEMS ARISING IN MECHANICS (MATHEMATICAL SCIENCES) (MCS-8201539*; 24 MONTHS \$16,000)

PLATT, RUTHERFORD H. THE ROLE OF REGIONAL GOVERNMENTS IN MANAGING METROPOLITAN FLOODPLAINS (CEE-8209526; 12 MONTHS \$112,380)

MICHIGAN

MICHIGAN STATE UNIVERSITY

CLOUD, GARY L. WHOLE-FIELD INTERFEROMETRIC MEASUREMENT OF SURFACE FLOW AND STRAIN RATE IN IN-SITU ICE MASSES (CEE-8008273 A01; 12 MONTHS \$23,475)

MICHIGAN TECHNOLOGICAL UNIVERSITY

CRITTENDEN, JOHN C. MATHEMATICAL MODELING OF FIXED BED ADSORPTION SYSTEMS FOR WATER TREATMENT (CEE-7924589 A02; 12 MONTHS \$38,810)

UNIVERSITY OF MICHIGAN-ANN ARBOR

WEBER, WALTER J. DETERMINATION OF MASS TRANSPORT PARAMETERS USED IN ENGINEERING DESIGN OF ADSORPTION SYSTEMS FOR WATER AND WASTEWATER TREATMENT (CEE-8112945; 12 MONTHS \$75,912)

KIKUCHI, NOBORU, AND TAYLOR, JOHN E. ANALYSIS AND COMPUTATIONAL METHODS FOR OPTIMAL STRUCTURAL DESIGN (CEE-8118158; 12 MONTHS \$72,251)

WYLLIE, E. BENJAMI. TWO PROBLEMS IN MODELING TRANSIENT FLOWS (WATER RESOURCES ENGINEERING) (CEE-8120934; 12 MONTHS \$44,998)

WIGHT, JAMES K. PREPARATION AND ANALYSIS OF DATA FROM THE FULL SCALE REINFORCED CONCRETE BUILDING TESTED IN TSUKUBA, JAPAN (CEE-8121843; 12 MONTHS \$74,476)

HANSON, ROBERT D. AND MCCLAMROCH, NATHANIEL H. UNITED STATES-JAPAN COOPERATIVE EARTHQUAKE RESEARCH PROGRAM - PSEUDO-DYNAMIC TEST METHOD (EARTHQUAKE ENGINEERING) (CEE-8207375; 12 MONTHS \$38,000)

HANSON, ROBERT D. UNITED STATES-JAPAN COOPERATIVE EARTHQUAKE RESEARCH PROGRAM - UNITED STATES TECHNICAL COORDINATING COMMITTEE (EARTHQUAKE ENGINEERING) (CEE-8207414; 24 MONTHS \$50,000)

CARR, ROBERT I. WORKSHOP ON CONSTRUCTION ENGINEERING BASIC RESEARCH (CEE-8209538; 9 MONTHS \$21,455)

HANSON, ROBERT D. UNITED STATES-JAPAN COOPERATIVE EARTHQUAKE RESEARCH PROGRAM-FULL-SIZE STRUCTURAL STEEL BUILDING SPECIMEN (EARTHQUAKE ENGINEERING) (CEE-8213270; 12 MONTHS \$211,000)

WAYNE STATE UNIVERSITY

AKTAN, HALUK M. RESEARCH INITIATION: EXPERIMENTAL INVESTIGATION OF DOWEL AND AGGREGATE INTERLOCK MECHANISMS OF SHEAR TRANSFER UNDER CONSTANT AXIAL PRESSURE STATES (CEE-8203642; 24 MONTHS \$48,000)

MINNESOTA

UNIVERSITY OF MINNESOTA

BESKOS, DIMITRIOS E. AND VARDOLAKIS, IOANNIS G. ISOLATION OF STRUCTURES FROM GROUND-TRANSMITTED VIBRATIONS BY USE OF WAVE BARRIERS (CEE-8109723; 12 MONTHS \$58,194)

FAIRHURST, CHARLES, AND STARFIELD, ANTHONY M. RATIONAL DESIGN OF TUNNEL SUPPORT SYSTEMS (CEE-8120700; 12 MONTHS \$59,965)

PARKER, GARY. RESEARCH INITIATION: THEORETICAL RIVER MECHANICS (CEE-8204953; 24 MONTHS \$47,942)

GULLIVER, JOHN S. RESEARCH INITIATION: EXPERIMENTAL INVESTIGATION OF WATER SURFACE GAS EXCHANGE (CEE-8205078; 24 MONTHS \$48,000)

VARDOLAKIS, IOANNIS G. PREPARATORY EFFORTS FOR U.S. PARTICIPATION IN THE INTERNATIONAL WORKSHOP ON CONSTITUTIVE BEHAVIOR OF SOILS, GRENOBLE, 6-8 SEPTEMBER 1982 (CIVIL ENGINEERING) (CEE-8209978; 12 MONTHS \$4,616)

UNIVERSITY OF MINNESOTA AT SAINT PAUL

GALAMBOS, THEODORE V. PREPARATION OF FOURTH EDITION OF 'GUIDE TO STABILITY DESIGN CRITERIA FOR METAL STRUCTURES' (CEE-8115346 A01*; \$26,030)

MISSISSIPPI

UNIVERSITY OF MISSISSIPPI

GUPTA, VINEY K. FUNDAMENTAL STUDIES ON SUBSURFACE TRANSPORT THEORY (CEE-8004498 A02; 12 MONTHS \$20,506)

MISSOURI

ST LOUIS UNIVERSITY

HERRMANN, ROBERT B. AND NUTTLI, OTTO W. STRONG GROUND MOTION SCALING FOR THE CENTRAL UNITED STATES (EARTHQUAKE ENGINEERING) (CEE-8204222; 12 MONTHS \$75,836)

UNIVERSITY OF MISSOURI, ROLLA

PRAKASH, SHAMSHER, AND STEPHENSON, RICHARD W. EQUIPMENT FOR EARTHQUAKE STUDIES OF THE LOESSIAL SOILS OF THE MIDWEST (CEE-8203094; 18 MONTHS \$33,300)

PLUMMER, PATRICIA L. SIXTH INTERNATIONAL CONFERENCE ON THE PHYSICS AND CHEMISTRY OF ICE (AUGUST 2-6, 1982) (ATM-8207411*; 12 MONTHS \$1,000)

WASHINGTON UNIVERSITY

GOULD, PHILLIP L. ROTATIONAL SHELL STRUCTURES WITH LOCAL MODIFICATIONS (CEE-8111797; 24 MONTHS \$90,122)

BASU, PRODYOT K. DIMENSIONAL REDUCTION FOR STRUCTURAL PLATES AND SHELLS (CEE-8115675; 12 MONTHS \$41,277)

SRIDHARAN, SRINIVASA; RESEARCH INITIATION: INTERACTIVE BUCKLING STRENGTH OF STEEL PLATE STRUCTURES (CEE-820673); 24 MONTHS \$48,000

MONTANA

MONTANA STATE UNIVERSITY

BROWN, ROBERT L; A THERMODYNAMIC STUDY OF TEMPERATURE GRADIENT METAMORPHISM OF DRY SNOWPACK (CEE-7901636 A04); 12 MONTHS \$31,980

NEVADA

UNIVERSITY OF NEVADA, RENO

DOUGLAS, BRUCE M; MAXIMUM AMPLITUDE NONDESTRUCTIVE DYNAMIC TESTING OF A HIGHWAY BRIDGE AND IMPLICATIONS FOR SEISMIC DESIGN (CEE-8108124); 12 MONTHS \$112,506

DOUGLAS, BRUCE M; FIELD STUDY OF CONCRETE FORM LOADS AND PRESSURES (CEE-8118427); 12 MONTHS \$45,616

NEW HAMPSHIRE

UNIVERSITY OF NEW HAMPSHIRE, DURHAM

WEBER, JAMES H; FORMATION, STABILITY AND TRANSPORT OF ORGANOMETALLIC COMPOUNDS IN NATURAL WATERS (CEE-8116960); 12 MONTHS \$47,817

NEW JERSEY

PRINCETON UNIVERSITY

GRAY, WILLIAM G, PINDER, GEORGE F, AND CRERAR, DAVID A; INVESTIGATION INTO THE PHYSICAL-CHEMICAL ASPECTS OF SOLUTION MINING (CEE-7920996 A02); 12 MONTHS \$104,625

GRAY, WILLIAM G; A TWO-DIMENSIONAL FINITE ELEMENT MODEL FOR SURFACE FLOW SIMULATION (CEE-7921076 A02); 12 MONTHS \$34,383

PREVOST, JEAN H, AND SCANLAN, ROBERT H; EFFECTS OF STRESS WAVES IN DYNAMIC SOIL TESTS EMPLOYING THE CENTRIFUGE TECHNIQUE (CEE-8015987 A01*); 12 MONTHS \$88,260

ABDEL-GHAFFAR, AHMED M; EARTHQUAKE RESPONSE ANALYSIS OF SUSPENSION BRIDGES (CEE-8017738 A01); 12 MONTHS \$67,497

WOOD, ERIC F; GLOBAL STABILITY ANALYSES FOR ENVIRONMENTAL SYSTEMS (CEE-8100491); 12 MONTHS \$96,406

PINDER, GEORGE F; SIMULATION OF MULTI-PHASE FLOW PHENOMENON VIA CATASTROPHE THEORY (CEE-8111240); 12 MONTHS \$63,381

ABDEL-GHAFFAR, AHMED M, AND SCANLAN, ROBERT H; FULL-SCALE VIBRATION MEASUREMENTS OF THE GOLDEN GATE SUSPENSION BRIDGE (CEE-8113567); 6 MONTHS \$86,574

ABDEL-GHAFFAR, AHMED M; THREE-DIMENSIONAL AND NONLINEAR EARTHQUAKE-RESPONSE ANALYSIS OF EARTH AND ROCKFILL DAMS (CEE-8120757); 24 MONTHS \$154,867

POWELL, WARREN B; RESEARCH INITIATION: INVESTIGATION OF TIME-BASED DISPATCH STRATEGIES IN BULK SERVICE QUEUES (TRANSPORTATION ENGINEERING) (CEE-820476); 24 MONTHS \$47,650

MARK, ROBERT; TECHNICAL STUDY OF ANCIENT ROMAN ARCHITECTURE (SES-8205841*); 18 MONTHS \$2,000

CAKMAK, AHMET S; GROUP TRAVEL FOR U.S. PARTICIPANTS IN INTERNATIONAL CONFERENCE ON SOIL DYNAMICS AND EARTHQUAKE ENGINEERING (CEE-8208982); 3 MONTHS \$5,801

NEW MEXICO

NEW MEXICO STATE UNIVERSITY

BOLIN, ROBERT, AND BOLTON, PATRICIA A; DISASTER AID PROGRAMS AND MINORITY FAMILY RECOVERY: A TWO SITE LONGITUDINAL COMPARISON (CEE-8115640); 24 MONTHS \$273,446

UNIVERSITY OF NEW MEXICO

MAY, GERALD W; SUPPORT OF THE INTERNATIONAL WORKING GROUP ON IMPROVEMENT OF EARTHEN BUILDINGS IN SEISMIC AREAS (8213171); 12 MONTHS \$21,986

NEW YORK

CLARKSON COLLEGE OF TECHNOLOGY

ACKERMANN, NORBERT L, SHEN, HUNG, AND PONCE-CAMPOS, C DAVID; SHEAR FLOW OF WATER-BORNE FRAGMENTED ICE FIELDS (CEE-8011801 A01); 12 MONTHS \$19,907

SHAHINPOOR, MOHSEN; DETERMINATION OF THE FREQUENCY DISTRIBUTION OF VOIDS IN RANDOMLY PACKED TWO-DIMENSIONAL GRANULAR ASSEMBLIES BY SPECIAL OPTICAL SCANNING TECHNIQUES (CEE-8021082 A01); 12 MONTHS \$26,222

MINNETYAN, LEVON; DYNAMIC CHARACTERISTICS OF STEEL FIBROUS REINFORCED CONCRETE AS RELATED TO ASEISMIC DESIGN (CEE-8117904); 24 MONTHS \$131,268

COLUMBIA UNIVERSITY

SHINOZUKA, MASANOBU, LONGMAN, RICHARD W, AND STUBBS, N; RESPONSE OF FLOATING STRUCTURES TO EARTHQUAKE AND OTHER DYNAMIC LOADS (CEE-8019275 A01); 12 MONTHS \$105,822

DASGUPTA, GUATAM; COMPUTER PROGRAMS FOR DYNAMIC STIFFNESS MATRICES OF FOUNDATIONS BY CLONING ALGORITHM (CEE-8116645); 24 MONTHS \$106,850

DIMAGGIO, FRANK L; DOUBLY ASYMPTOTIC APPROXIMATIONS AS NON-REFLECTING BOUNDARIES IN FLUID-STRUCTURE INTERACTION PROBLEMS (CEE-8117350); 24 MONTHS \$87,620

MEYER, CHRISTIAN; SEISMIC RELIABILITY OF DAMAGED CONCRETE BUILDINGS (CEE-8121359); 12 MONTHS \$56,394

COLUMBIA UNIVERSITY-LAMONT-DOHERTY GEOLOGICAL OBSERVATORY

RICHARDS, PAUL G, AND DAS, SHAMITA; QUANTITATIVE STUDIES OF HIGH FREQUENCY STRONG GROUND MOTION (CEE-8023170 A02); 12 MONTHS \$51,147

SCHOLZ, CHRISTOPH H, AND JONES, LUCILE M; A COOPERATIVE U.S.-CHINA PROJECT FOR EVALUATING SEISMIC HAZARDS (EARTHQUAKE ENGINEERING) (CEE-8206853); 12 MONTHS \$74,993

CORNELL UNIVERSITY

MILLER, ROBERT D; HYDRAULIC CONDUCTIVITY OF FROZEN SOIL (CEE-8017422 A01); 12 MONTHS \$24,127

DICK, RICHARD I; RHEOLOGY OF BIOLOGICAL WASTEWATER SUSPENSIONS (CEE-8111249); 12 MONTHS \$64,250

MCGUIRE, WILLIAM, ABEL, JOHN F, AND GREENBERG, DONALD P; NONLINEAR ANALYSIS AND DESIGN OF STEEL FRAMES (CIVIL ENGINEERING) (CEE-8117028); 12 MONTHS \$178,295

PAO, YIH-HSING; NINTH U.S. NATIONAL CONGRESS OF APPLIED MECHANICS (08A-8118159*); 8 MONTHS \$10,082

JENKINS, JAMES T; U.S.-JAPAN JOINT SEMINAR: NEW MODELS AND CONSTITUTIVE RELATIONS IN THE MECHANICS OF GRANULAR MATERIALS/AUGUST, 1982/ITHACA, NEW YORK (INT-8121058*); 12 MONTHS \$2,500

PHILPOT, WILLIAM D; RESEARCH INITIATION: EXPERIMENTAL VERIFICATION OF AN IRRADIANCE TRANSFER MODEL FOR ASSESSMENT OF WATER QUALITY (CEE-8204579); 24 MONTHS \$47,704

CORNELL UNIVERSITY-CORNELL UNIVERSITY - ENDOWED

MCGUIRE, WILLIAM, ABEL, JOHN F, AND GREENBERG, DONALD P; NONLINEAR ANALYSIS AND DESIGN OF STEEL FRAMES (CEE-7815357 A03); 9 MONTHS \$24,967

LIGGETT, JAMES A, AND LIU, PHILIP L; BOUNDARY INTEGRAL SOLUTIONS TO GROUNDWATER PROBLEMS (CEE-7902803 A02); 12 MONTHS \$79,239

BRUTSAERT, WILFRIED H; SURFACE GAS TRANSFER IN ENVIRONMENTAL WATERS (CEE-8004621 A02); 12 MONTHS \$114,318

GERGELY, PETER; DESIGN OF SPLICES IN REINFORCED CONCRETE FRAMES AND FLAT ELEMENTS FOR EARTHQUAKE EFFECTS (CEE-8011115 A01); 12 MONTHS \$83,070

INGRAFFEA, ANTHONY R; INTERACTION BETWEEN STEEL AND CONCRETE FOR EARTHQUAKE TYPE LOADINGS (CEE-8020925 A01); 12 MONTHS \$74,890

LIU, PHILIP L, AND KULHAWY, FRED H; ASSESSMENT OF EFFECTIVE STRESSES IN SEAFLOOR SOILS UNDER WATER-WAVE LOADING (CEE-8200272); 24 MONTHS \$114,616

PAO, YIH-HSING; GROUND WAVES IN DIPPING LAYERS (EARTHQUAKE ENGINEERING) (CEE-8206758); 24 MONTHS \$175,210

CORNELL UNIVERSITY-CORNELL UNIVERSITY - STATE

LOEHR, RAYMOND C; ACQUISITION OF INSTRUMENT FOR DETERMINATION OF THE FATE AND TRANSFORMATIONS OF ELEMENTS IN SOIL AND WASTE TREATMENT SYSTEMS (CEE-8214721); 12 MONTHS \$6,240

INSTITUTE FOR ITALIAN AMERICAN STUDIES

CAPORALE, ROCCO, AND ROSSI, INO; LONG-TERM EFFECTS OF THE 1980 EARTHQUAKE IN SOUTHERN ITALY: RECOVERY AND RECONSTRUCTION (CEE-8112952); 12 MONTHS \$131,009

NEW YORK UNIVERSITY-MEDICAL CENTER

YOUNG, LILY Y; BIODEGRADATION OF AROMATIC HYDROCARBONS UNDER REDUCTIVE, ANAEROBIC CONDITIONS (CEE-8118018); 12 MONTHS \$78,121

POLYTECHNIC INSTITUTE OF NEW YORK

KOZIN, FRANK, WANG, PING CHUN, AND DRENICK, RUDOLF F; ACTIVE CONTROL OF CIVIL ENGINEERING STRUCTURES (CEE-7825490 A02); 12 MONTHS \$87,100

RENSSELAER POLYTECHNIC INSTITUTE

SPILLERS, WILLIAM R; OPTIMAL STRUCTURAL GEOMETRY FOR MULTIPLE LOADING CONDITIONS (CEE-8015780 A01); 12 MONTHS \$52,825

DOBRY, RICARDO; EXPERIMENTAL STUDY OF THE CYCLIC CONSTITUTIVE RELATION OF SATURATED SANDS DURING UNDRAINED LOADING (CEE-8020779 A01); 12 MONTHS \$72,450

O'ROURKE, MICHAEL J; SNOW LOADS ON STRUCTURES - A FACTOR IN SEISMIC RESPONSE (CEE-8110025*); 12 MONTHS \$41,890

GAZETAS, GEORGE; SOIL ANISOTROPY IN SOIL-STRUCTURE INTERACTION (CEE-8200955); 12 MONTHS \$33,462

GAZETAS, GEORGE, AND DOBRY, RICARDO; SEISMIC BEHAVIOR AND LIQUEFACTION OF EARTH DAMS: A NEW APPROACH (CEE-8206345); 24 MONTHS \$134,425

GAZETAS, GEORGE; SEISMIC VULNERABILITY, ANALYSIS AND DESIGN OF ANCHORED BULKHEADS (EARTHQUAKE ENGINEERING) (CEE-8206349); 24 MONTHS \$67,472

STATE UNIVERSITY AT BUFFALO

SOONG, TSU T; ACTIVE CONTROL IN STRUCTURAL ENGINEERING (CEE-8010891 A01); 12 MONTHS \$51,092

BANERJEE, PRASANTA K; DYNAMIC ANALYSES OF PILE GROUPS UNDER AXIAL AND LATERAL LOADS (CEE-8018402 A01); 12 MONTHS \$54,154

MANOLIS, GEORGE D; RESEARCH INITIATION: DYNAMIC RESPONSE OF BURIED THREEDIMENSIONAL STRUCTURES (CEE-8202904); 24 MONTHS \$43,532

LEE, GEORGE C. AUTOMATED CONTROL/DATA ACQUISITION SYSTEMS FOR SUNY-BUFFALO EARTHQUAKE SIMULATOR (CEE-8204471); 24 MONTHS \$197,824

STEVEN WINTER ASSOCIATES INC

WINTER, STEVEN; IDENTIFICATION OF POTENTIAL CONFLICTS BETWEEN PASSIVE SOLAR DESIGN AND SEISMIC RISKS IN RESIDENTIAL AND COMMERCIAL BUILDINGS (CEE-8113438 A01); 12 MONTHS \$97,886

SYRACUSE RESEARCH CORPORATION

LAMBRIGHT, W HENRY; THE ROLE OF STATES IN EARTHQUAKE AND NATIONAL HAZARD INNOVATIONS AT THE LOCAL LEVEL (CEE-8018710 A01); 18 MONTHS \$39,834

SYRACUSE UNIVERSITY

LIBOVE, CHARLES; STRESS ANALYSIS OF SANDWICH PLATES AND SHELLS OF VARIABLE THICKNESS (CEE-8119613); 12 MONTHS \$56,307
BHATIA, SHOBHA K.; RESEARCH INITIATION: THE DEVELOPMENT OF CONSTITUTIVE RELATIONSHIP FOR SEISMIC PORE PRESSURE AND SETTLEMENT (CEE-8205235); 24 MONTHS \$47,954

UNITED ENGINEERING TRUSTEES INC

COLE, SANDFORD S. ENGINEERING FOUNDATION CONFERENCE ON URBAN STORMWATER DETENTION (CEE-8206018); 7 MONTHS \$5,000
HAIMES, YACOV Y. CONFERENCE ON MULTIOBJECTIVE ANALYSIS IN WATER RESOURCES (NOV. 14-19, 1982 - SANTA BARBARA, CALIFORNIA) (CEE-8209949); 6 MONTHS \$5,000

WEIDLINGER ASSOCIATES

ISENBERG, JEREMY, AND BARON, MELVIN L. TELECOMMUNICATIONS LIFELINES IN A SEISMIC ENVIRONMENT (CEE-8116842); 12 MONTHS \$188,723

NORTH CAROLINA

DUKE UNIVERSITY

MELOSH, ROBERT J. DEVELOPMENT OF AN EARTHQUAKE ENGINEERING COMPUTER BASED CONSULTANT SYSTEM (CEE-7902991 A02); 12 MONTHS \$122,365

PETROSKI, HENRY J. PLASTIC RESPONSE OF CRACKED BEAMS TO DYNAMIC LOADING (CEE-8117672); 24 MONTHS \$52,919

NORTH CAROLINA STATE UNIVERSITY AT RALEIGH

GUPTA, AJAYA K. COMPUTER MODELS FOR THE SEISMIC BEHAVIOR OF LOW-RISE WOOD-FRAMED BUILDINGS (CEE-8211100); 12 MONTHS \$66,456

UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL

JOHNSON, J D. ULTRAVIOLET RADIATION DOSE DETERMINATION IN DISINFECTION OF WATER AND WASTEWATER (CEE-8205274); 12 MONTHS \$66,672

BURBY, RAYMOND J. EVALUATION OF STATE PROGRAMS FOR FLOOD HAZARD MITIGATION (CEE-8209884); 12 MONTHS \$88,520

UNIVERSITY OF NORTH CAROLINA AT CHARLOTTE

WU, JY S. MODELING METHODOLOGY FOR DUAL-FUNCTION STORM-WATER DETENTION BASINS (CEE-8121365); 12 MONTHS \$42,284

OHIO

CASE WESTERN RESERVE UNIVERSITY

SAADA, ADEL S. STATIC AND DYNAMIC BEHAVIOR OF ANISOTROPIC COHESIONLESS SOIL UNDER COMBINED STRESSES (CEE-8112070); 12 MONTHS \$69,856

MULLEN, ROBERT L. RESEARCH INITIATION: DEVELOPMENT OF SUPER STABLE EXPLICIT INTEGRATION METHOD (CEE-8204581); 24 MONTHS \$47,919

OHIO STATE UNIVERSITY

BISHARA, ALFRED G. VERIFICATION OF CONSTITUTIVE RELATIONS FOR SILAGE THROUGH FULL-SCALE SILO MEASUREMENTS (CEE-7908408 A02); 12 MONTHS \$20,500

WU, T H. EFFECT OF VEGETATION ROOTS ON SLOPE STABILITY (CEE-8112553); 12 MONTHS \$65,282

UNIVERSITY OF AKRON MAIN CAMPUS

ROSS, DAVID A. RESEARCH INITIATION: POST-BUCKLING STRENGTH OF TUBULAR COLUMNS WITH END RESTRAINT (CEE-8204780); 24 MONTHS \$47,565

YOUNGSTOWN STATE UNIVERSITY

KHAN, IRFAN A. INVERSE PROBLEM IN GROUNDWATER (CEE-8025809 A01); 12 MONTHS \$31,813

OKLAHOMA

OKLAHOMA STATE UNIVERSITY

LANGE, JAMES N. ACOUSTIC PROPERTIES OF PARTIALLY SATURATED GEOTHERMAL AND PETROLEUM RESERVOIRS (CEE-8019278 A01); 12 MONTHS \$52,000

SONI, A H. SEISMIC ANALYSIS FOR ROTATING MECHANICAL SYSTEMS (CEE-8108119 A01); 12 MONTHS \$46,029

UNIVERSITY OF OKLAHOMA NORMAN CAMPUS

WANG, LEON R L. UNITED STATES-CHINA COOPERATIVE EARTHQUAKE RESEARCH - FIELD INVESTIGATION AND ANALYSIS OF BURIED PIPELINES UNDER SEISMIC DISTURBANCES (I) (EARTHQUAKE ENGINEERING) (CEE-8209241); 24 MONTHS \$69,287

UNIVERSITY OF TULSA

ARIMAN, TEOMAN; BUCKLING AND RUPTURE OF PIPELINES DUE TO LARGE GROUND DEFORMATIONS (CEE-8121674); 12 MONTHS \$87,276

ARIMAN, TEOMAN; UNITED STATES-CHINA COOPERATIVE EARTHQUAKE RESEARCH - FIELD INVESTIGATION AND ANALYSIS OF BURIED PIPELINES UNDER SEISMIC DISTURBANCES (II) (EARTHQUAKE ENGINEERING) (CEE-8209941); 24 MONTHS \$60,518

OREGON

OREGON STATE UNIVERSITY

NATH, JOHN H. HYDRODYNAMIC ROUGHNESS OF MARINE GROWTHS ON CYLINDERS (CEE-7911787 A02); 12 MONTHS \$57,961

VINSON, TED S. CENTRIFUGAL MODELING OF ICE FLOE FORCES AND THEIR FAILURE MECHANISMS FOR OFFSHORE STRUCTURES (CEE-8116162); 12 MONTHS \$77,805

PENNSYLVANIA

BUCKNELL UNIVERSITY

BRUNGRABER, ROBERT J. ACQUISITION OF A UNIVERSAL TESTING MACHINE (CEE-8200560); 6 MONTHS \$25,000

CARNEGIE-MELLON UNIVERSITY

CHRISTIANO, PAUL P. SEISMIC BEHAVIOR OF CELLULAR COFFER-DAMS (CEE-8006781 A01); 12 MONTHS \$69,580

JANSON, BRUCE N. RESEARCH INITIATION: PROGRAMMING HIGH-WAY NETWORK EXPENDITURES USING STOCHASTIC ESTIMATES OF ROADWAY LIFE CYCLES IN A NETWORK DESIGN FRAMEWORK (CEE-8204924); 24 MONTHS \$46,262

HENDRICKSON, CHRIS T. QUADRATIC METHOD TO ESTIMATE MATRIX ENTRIES AND UNCERTAINTY FOR TRANSPORTATION SYSTEM ANALYSIS (CEE-8209755); 17 MONTHS \$56,884

DREXEL UNIVERSITY

KOERNER, ROBERT M. AND LEAIRD, JAMES D. INDUSTRY/UNIVERSITY COOPERATION RESEARCH: ACOUSTIC EMISSION MONITORING OF SEEPAGE, GROUTING, AND HYDROFRACTURING FRONTS IN IN-SITU GEOLOGICAL MATERIALS (CEE-8108178*); 12 MONTHS \$34,636

LOL, MIRAT D. RESEARCH INITIATION: KINETICS AND MECHANISMS OF OZONATION OF SUBSTITUTED PHENOLS IN WASTEWATER (CEE-8204922); 24 MONTHS \$48,000

HASIT, YAKIR. RESEARCH INITIATION: A STOCHASTIC APPROACH TO PROCESSING SLUDGES DERIVED FROM TREATMENT OF WASTEWATER (CEE-8204929); 24 MONTHS \$48,000

D'APPALONI CONSULTING ENGINEERS INC

VAIDYA, N R. FEASIBILITY EVALUATION OF BASE ISOLATION FOR THE SEISMIC DESIGN OF STRUCTURES (CEE-8100684); 12 MONTHS \$132,268

LEHIGH UNIVERSITY

BEEDLE, LYNN S. EARTHQUAKE RESISTANCE OF HIGH-RISE BUILDING SYSTEMS (CEE-8105306 A01); 12 MONTHS \$206,035

HUANG, TI, AND LU, LE-WU. DIAPHRAGM BEHAVIOR OF FLOOR SYSTEMS AND ITS EFFECT ON SEISMIC BUILDING RESPONSE (CEE-8120589); 12 MONTHS \$99,975

BEEDLE, LYNN S. THIRD INTERNATIONAL COLLOQUIUM: STABILITY DESIGN CONSIDERATIONS: NEW APPROACHES AND COMPARISONS (CEE-8206935*); 36 MONTHS \$35,443

LU, LE-WU. UNITED STATES-JAPAN COOPERATIVE EARTHQUAKE RESEARCH PROGRAM - QUASI-STATIC TESTS OF MOMENT FRAMES AND BRACED FRAMES WITH COMPOSITE SLAB (EARTHQUAKE ENGINEERING) (CEE-8207712); 12 MONTHS \$130,000

PENNSYLVANIA STATE UNIVERSITY

UNZ, RICHARD F. ISOLATION AND CHARACTERIZATION OF FILAMENTOUS MICROORGANISMS FROM BULKING ACTIVATED SLUDGE (CEE-7918919 A02); 12 MONTHS \$134,295

UNIVERSITY OF PITTSBURGH

CHIU, CHAO-LIN. THREE-DIMENSIONAL FLOW IN ALLUVIAL CHANNELS (CEE-8109440); 36 MONTHS \$179,706

STYLER, ANTHONY N. RESEARCH INITIATION: AN INVESTIGATION INTO GEOLOGICAL FACTORS AFFECTING RIB PILLAR AND FACE SUPPORT DESIGN OF MINES (CEE-8205099); 24 MONTHS \$47,036

SOUTH CAROLINA

CLEMSON UNIVERSITY

ANAND, SUBHASH C. SEISMIC RESPONSE OF COMPOSITE MASONRY IN NEW AND EXISTING STRUCTURES (CEE-8026767 A01); 12 MONTHS \$94,481

GRADY, C P. KINETICS AND MECHANISMS FOR THE REMOVAL OF INDIVIDUAL ORGANIC COMPOUNDS FROM MULTICOMPONENT SUBSTRATES BY PURE AND MIXED BACTERIAL CULTURES UNDER STEADY STATE CONDITIONS (CEE-8116870); 12 MONTHS \$114,438

UNIVERSITY OF SOUTH CAROLINA AT COLUMBIA

RADZIMINSKI, JAMES B. AND PRADDBURN, J HUGH. INVESTIGATION OF SEMIRIGID STEEL BEAM-COLUMN CONNECTIONS SUBJECTED TO STATIC AND CYCLIC LOADINGS (CEE-8115014); 12 MONTHS \$66,447

TEXAS

LAMAR UNIVERSITY

YOUNG, FRED M. HYDRAULIC TRANSIENTS IN LIQUID-FILLED PIPELINES DURING EARTHQUAKES (CEE-8107292); 24 MONTHS \$49,446

RICE UNIVERSITY

ANDREWS, JOHN F. COMPUTER CONTROL OF THE ACTIVATED SLUDGE PROCESS (CEE-8204051*); 16 MONTHS \$125,217

TEXAS A & M UNIVERSITY

JEYAPALAN, JEY K; FLOOD-ROUTING ANALYSES FOR MINE TAILINGS IMPOUNDMENTS (CEE-8115160); 12 MONTHS \$24,000

TEXAS TECH UNIVERSITY

MINOR, JOSEPH E; RESEARCH ON WINDOW GLASS SUBJECTED TO DYNAMIC LOADS (CEE-8118214); 12 MONTHS \$163,832
NORVILLE, H SCOTT; RESEARCH INITIATION: PROBABILISTIC BEHAVIOR OF ELASTOPLASTIC COLUMNS DUE TO HORIZONTAL-VERTICAL EARTHQUAKE LOADS (CEE-8205317); 24 MONTHS \$46,683

UNIV OF TEXAS AT AUSTIN

HOLLEY, E R; TRANSPORT OF EFFLUENTS IN RIVERS, PHASE II (CEE-7923183 A02); 12 MONTHS \$61,896
YEW, C H, AND KYRIAKIDES, STELIOS; AN EXPERIMENTAL INVESTIGATION OF BUCKLING PROBLEMS OF BURIED PIPELINES IN SEISMIC ACTIVE AREAS (CEE-8110043); 24 MONTHS \$70,928

JIRSA, JAMES O; REPAIR AND STRENGTHENING OF REINFORCED CONCRETE STRUCTURES (CEE-8201305); 12 MONTHS \$139,491

SPANOS, POL D; STOCHASTIC ANALYSIS OF EARTHQUAKE INDUCED LINEAR AND NONLINEAR STRUCTURAL RESPONSES (CEE-8203752); 24 MONTHS \$96,715

MAIDMENT, DAVID R; RESEARCH INITIATION: THE EFFECT OF RAINFALL ON DAILY MUNICIPAL WATER USE (CEE-8204761); 24 MONTHS \$47,999

DANIEL, DAVID E; RESEARCH INITIATION: PERMEABILITY OF COMPACTED CLAYS USED TO LINE HAZARDOUS WASTE DISPOSAL PITS (CEE-8204967); 24 MONTHS \$47,999

UNIVERSITY OF HOUSTON CENTRAL CAMPUS

KAREEM, AHSAN; CROSSWIND RESPONSE OF TOWERS AND STACKS OF CIRCULAR CROSS-SECTION (CEE-8019392 A01); 12 MONTHS \$43,108

UNITED KINGDOM

GLACIOLOGICAL SOCIETY

COLBECK, SAMUEL C; SECOND SYMPOSIUM ON APPLIED GLACIOLOGY, HANOVER, N.H., AUGUST 23-27, 1982 (CEE-8211826); 12 MONTHS \$6,000

UTAH

UTAH STATE UNIVERSITY

TULLIS, J PAUL; EVALUATING SCALING CRITERIA FOR VORTEX MODELING (CEE-8110786); 24 MONTHS \$46,544

VIRGINIA

ASSOCIATION OF ENVIRONMENTAL ENGINEERING PROF

DIGIANO, FRANCIS A, AND CLESCERI, NICHOLAS L; CONFERENCE ON FUNDAMENTAL RESEARCH NEEDS FOR WATER AND WASTEWATER SYSTEMS (CEE-8208716); 9 MONTHS \$39,910

COLLEGE OF WILLIAM AND MARY

KREPS, GARY A; STUDIES IN DISASTER RESPONSE AND PLANNING (CEE-8121135); 12 MONTHS \$52,333

GEOLOGICAL SURVEY

BORCHERDT, ROGER D; NATIONAL EARTHQUAKE STRONG MOTION PROGRAM (CEE-7307125 A11); 12 MONTHS \$1,200,000

GEORGE MASON UNIVERSITY

WETMORE, WILLIAM; IPA MOBILITY ASSIGNMENT (061-8206594*); 12 MONTHS \$36,000

OLD DOMINION UNIVERSITY

CHAUDHRY, M HANIF; ANALYSIS AND STABILITY OF OSCILLATIONS IN A CLOSED SURGE TANK (CEE-8119614); 12 MONTHS \$29,215

UNIVERSITY OF VIRGINIA

SIMMONDS, JAMES G; THEORETICAL AND COMPUTATIONAL ASPECTS OF NONLINEAR SHELL THEORY: CLOSING THE GAP (CEE-8117103); 21 MONTHS \$75,843

VIRGINIA POLYTECHNIC INSTITUTE

SINGH, M P; SEISMIC DESIGN RESPONSE EVALUATION OF SECONDARY STRUCTURAL SYSTEMS WITH MULTIPLE SUPPORTS (CEE-8208897); 12 MONTHS \$45,361

WASHINGTON

ABAM ENGINEERS INC

CLOUGH, DOUGLAS, AND MAST, ROBERT F; DESIGN OF CONNECTIONS FOR PRECAST, PRESTRESSED CONCRETE BUILDINGS FOR THE EFFECTS OF EARTHQUAKE (CEE-8121733); 10 MONTHS \$158,453

BATTELLE MEMORIAL INSTITUTE-BATTELLE HUMAN AFFAIRS RESEARCH CENTERS

PERRY, RONALD W; CITIZEN ADOPTION OF MITIGATION MEASURES IN MULTIPLE IMPACT DISASTERS (CEE-8120436); 18 MONTHS \$173,176

UNIVERSITY OF WASHINGTON

SHERIF, MEHMET A; DYNAMIC EARTH PRESSURES USING SHAKING TABLE (CEE-7909794 A01); 6 MONTHS \$17,565

STANTON, JOHN F; RESEARCH INITIATION: PERFORMANCE OF PRESTRESSED CONCRETE PILES UNDER EARTHQUAKE LOADS (CEE-8107480 A01); 12 MONTHS \$94,321

RATTRAY, MAURICE; BAROCLINIC RESPONSE OF WIDE, DEEP ESTUARIES TO OFFSHORE ATMOSPHERIC FORCING - WITH APPLICATION TO THE STRAIT OF JUAN DE FUCA (CEE-8110708*); 12 MONTHS \$18,397

WILLIAMS, WALTER; IMPLEMENTING FEDERAL NATURAL DISASTER POLICIES: MANAGEMENT STRATEGIES UNDER SHARED GOVERNANCE (CEE-8111967); 21 MONTHS \$147,664

NIHAN, NANCY L; METHODOLOGY FOR ANALYZING THE IMPACTS OF TRAFFIC INTERVENTIONS ALONG A TRAFFIC STREAM (CEE-8115126); 12 MONTHS \$45,083

HAWKINS, NEIL M; DIAGONAL TENSION FRACTURE OF REINFORCED CONCRETE (CEE-8117029); 12 MONTHS \$96,812

WOLFE, MYER R, AND HEIKKALA, SUSAN G; LAND USE PLANNING AND EARTHQUAKE HAZARD MITIGATION: DEVELOPING A COST EFFECTIVENESS FRAMEWORK (CEE-8118450); 24 MONTHS \$136,892

BANERJEE, SUNIRMAL; RESEARCH INITIATION: DEVELOPMENT OF AN ELECTRO-OSMOTIC TESTING DEVICE FOR MEASUREMENT OF CONSOLIDATION PARAMETERS IN-SITU (CEE-8119411); 24 MONTHS \$47,475

ROEDER, CHARLES W; UNITED STATES-JAPAN COOPERATIVE EARTHQUAKE RESEARCH PROGRAM - SEISMIC TESTS OF A FULL-SCALE STEEL BUILDING (EARTHQUAKE ENGINEERING) (CEE-8207321); 12 MONTHS \$13,200

WEST VIRGINIA

WEST VIRGINIA UNIVERSITY

JENKINS, CHARLES R; PURCHASE OF TOTAL CARBON ANALYZER (CEE-8203203); 12 MONTHS \$15,000

WISCONSIN

MARQUETTE UNIVERSITY

VINNAKOTA, SRIRAMULU; INFLUENCE OF IMPERFECTIONS ON THE MAXIMUM STRENGTH OF RESTRAINED, BIAXIALLY LOADED BEAM COLUMNS (CEE-8204844); 12 MONTHS \$57,515

TRAVEL AWARD

ZAPOROZEC, ALEXANDER; TRAVEL TO ATTEND INTERNATIONAL SYMPOSIUM 'IMPACT OF AGRICULTURAL ACTIVITIES ON GROUND WATER' AT THE 16TH CONGRESS OF IAH, PRAGUE, CZECHOSLOVAKIA; SEPTEMBER 5-11, 1982 (CEE-8211097); 6 MONTHS \$1,600

UNIVERSITY OF WISCONSIN-MADISON

ATKISSON, ARTHUR A; EVALUATION OF ORDINANCES FOR EARTHQUAKE HAZARD ABATEMENT IN EXISTING BUILDINGS (CEE-8024728 A01); 12 MONTHS \$86,783

UNIVERSITY OF WISCONSIN-MILWAUKEE

CHRISTENSEN, ERIK R; ALGAL GROWTH UNDER MULTIPLE TOXICANT LIMITING CONDITIONS (CEE-8103650 A01); 12 MONTHS \$77,269

UNIVERSITY OF WISCONSIN-STEVENS POINT

WOLENSKY, ROBERT P; POWER, POLICY AND DISASTER: THE POLITICAL-ORGANIZATIONAL IMPACT OF A MAJOR FLOOD (CEE-8113529); 19 MONTHS \$59,722

MECHANICAL ENGINEERING & APPLIED MECHANICS

ARIZONA

ARIZONA STATE UNIVERSITY

ROY, RAMENDRA P; ON THE STATISTICAL NATURE OF DIABATIC ONE-COMPONENT TWOPHASE FLOW - AN EXPERIMENTAL APPROACH (MEA-8121955*); 8 MONTHS \$19,840

RAJAN, MAHESH; RESEARCH INITIATION: ON THE APPLICATION OF NOETHER'S THEOREM AND VARIATIONAL PRINCIPLES TO NONCONSERVATIVE SYSTEMS IN MECHANICS (MEA-8205096); 24 MONTHS \$47,281

UNIVERSITY OF ARIZONA

MCELIGOT, DONALD M; TURBULENCE STRUCTURE IN COMPLEX HEATED FLOWS (MEA-7907806 A02); 12 MONTHS \$97,664

DESAI, C S; INTERNATIONAL CONFERENCE ON CONSTITUTIVE LAWS FOR ENGINEERING MATERIALS: THEORY AND APPLICATION, JANUARY 10-14, 1983, TUCSON, ARIZONA (CEE-8202597*); 10 MONTHS \$10,878

KERSCHEN, EDWARD J; RESEARCH INITIATION: BEHAVIOR OF FLOW WITH SLIGHT VORTICITY AND THREE-DIMENSIONALITY IN THE VICINITY OF A TWO-DIMENSIONAL STAGNATION POINT (MECHANICAL ENGINEERING) (MEA-8205002); 24 MONTHS \$47,993

CALIFORNIA

CALIFORNIA INSTITUTE OF TECHNOLOGY

COLES, DONALD, AND ROSKHO, ANATOL; LARGE EDDIES IN TURBULENT SHEAR FLOW (MEA-7723541 A05); 12 MONTHS \$57,900

SABERSKY, ROLF H, BRENNEN, CHRISTOPH E, GROSS, L H, AND HAGERTY, R O; INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH PROGRAM: FLOW AND HEAT TRANSFER IN GRANULAR MEDIA (MEA-7915132 A02*); 12 MONTHS \$57,547

LEAL, L GARY; FLUID MECHANICS OF BUBBLES, DROPS, AND RIGID PARTICLES (MEA-8003485 A02*); 12 MONTHS \$36,000

LEAL, L GARY; FLUID MECHANICS OF BUBBLES, DROPS AND RIGID PARTICLES (MECHANICAL ENGINEERING AND APPLIED MECHANICS) (MEA-8003485 A03); 12 MONTHS \$115,000

WU, THEODORE Y; BIOPHYSICAL FLUID MECHANICS (MEA-8118429); 12 MONTHS \$80,000

STURTEVANT, BRADFORD; PROPAGATION OF SHOCK WAVES IN RANDOM MEDIA (MEA-8120092); 12 MONTHS \$62,970

KNAUSS, WOLFGANG G; WORKSHOP ON DYNAMIC FRACTURE, PASADENA, CALIFORNIA, FEBRUARY, 1983 (MEA-8208105); 12 MONTHS \$24,281

CALIFORNIA STATE UNIVERSITY, LONG BEACH

CEBECL, TUNCER; INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH: THEORETICAL AND EXPERIMENTAL ANALYSIS OF INTERACTING FLOWS OVER MULTIELEMENT AIRFOILS AT HIGH REYNOLDS NUMBERS (MEA-8018565 A01*); 12 MONTHS \$56,500

CEBECL, TUNCER; SECOND SYMPOSIUM ON NUMERICAL AND PHYSICAL ASPECTS OF AERODYNAMIC FLOWS, CALIF. STATE UNIV., LONG BEACH, CALIF., JAN 17-20, 1983 (MECHANICAL ENGINEERING & APPLIED MECHANICS) (29A-8209798); 12 MONTHS \$17,996

DYNAMICS TECHNOLOGY INC

MC LAUGHLIN, DENNIS, AND DUBE, C M; INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH: PARTICLE MOTION IN A TURBULENT BOUNDARY LAYER (MEA-8003437 A01*); 12 MONTHS \$30,433

NAVAL POSTGRADUATE SCHOOL

MARTO, PAUL J; ENHANCED CONDENSATION OF STEAM ON HORIZONTAL TUBES (MECHANICAL ENGINEERING) (MEA-8203567); 12 MONTHS \$36,000

SRI INTERNATIONAL

CURRAN, DONALD R, TOKHEIM, ROBERT E, AND SEAMAN, LYNN; DEVELOPMENT OF CONSTITUTIVE RELATIONS FOR POROUS, DUCTILE METALS (MEA-8108186); 12 MONTHS \$68,602

ZAVALA, ALBERT; PRODUCTIVITY IN DEVELOPMENT OF SOFTWARE FOR MANUFACTURING (MEA-8200440); 12 MONTHS \$141,049

STANFORD UNIVERSITY

VAN DYKE, MILTON D; FLOW CALCULATION BY COMPUTER EXTENSION AND IMPROVEMENT OF PERTURBATION SERIES (MEA-7824412 A01); 12 MONTHS \$48,420

MOFFATT, ROBERT J; HEAT TRANSFER IN A CHANNEL WITH ONE ROUGH WALL (MEA-7906337 A02); 12 MONTHS \$43,290

JOHNSTON, JAMES P; STRUCTURE OF REATTACHING TURBULENT SHEAR FLOWS (MEA-8017860 A01); 12 MONTHS \$82,587

BINFORD, THOMAS O; EXPLORATORY RESEARCH IN INTEGRATED PROGRAMMABLE AUTOMATION (MECHANICAL ENGINEERING) (MEA-8019628 A01); 12 MONTHS \$248,304

EATON, JOHN K; CENTRAL COMPUTER FOR AN INTEGRATED LABORATORY COMPUTER SYSTEM (MEA-8104740); 12 MONTHS \$79,745

REYNOLDS, WILLIAM C; FUNDAMENTAL STUDIES OF UNSTEADY TURBULENT BOUNDARY LAYER HEAT TRANSFER (MEA-8107205); 12 MONTHS \$63,600

EATON, JOHN K; HEAT TRANSFER IN A SEPARATED AND REATTACHING FLOW (MEA-8108139); 24 MONTHS \$85,000

STEELE, CHARLES R; ANALYSIS OF COCHLEAR MODELS WITH DISCONTINUITIES (MEA-8119518); 24 MONTHS \$125,000

ROTH, BERNARD; LOCAL AND GLOBAL KINEMATICS OF MULTI-DEGREE-OF-FREEDOM SYSTEMS (MEA-8207694); 12 MONTHS \$65,000

TRW INC-TRW INC-REDONDO BEACH

YUEN, HENRY C, LAKE, BRUCE, AND SAFFMAN, PHILIP G; INTERACTION BETWEEN A TURBULENT WIND AND FINITE AMPLITUDE WATER WAVES (OCE-8100517 A01*); 12 MONTHS \$30,000

UNIVERSITY OF CALIFORNIA, BERKELEY

WEBSTER, WILLIAM C, AND WEHAUSEN, JOHN V; HYDRODYNAMICS OF DEFORMABLE BODIES (MEA-7921244 A01); 12 MONTHS \$66,013

HSU, CHIEH S; METHODS OF GLOBAL ANALYSIS FOR NONLINEAR DYNAMICAL SYSTEMS (MEA-8019274 A01); 12 MONTHS \$75,000

DORNFELD, DAVID; DEVELOPMENT OF A COMPREHENSIVE CONTROL STRATEGY FOR GAS METAL ARC WELDING (MEA-8102889 A01); 12 MONTHS \$53,907

GREIF, RALPH; HEAT TRANSFER AND FLUID FLOW IN NATURAL CIRCULATION LOOPS (MECHANICAL ENGINEERING) (MEA-8107202 A01); 12 MONTHS \$44,999

TALBOT, LAWRENCE, AND BERGER, STANLEY A; FLOW THROUGH HEART VALVES AND LARGE VESSELS (MEA-8116360); 12 MONTHS \$94,349

JOHNSTON, GEORGE C; STUDY OF THE ACOUSTOELASTIC EFFECT IN ELASTIC PLASTIC MATERIALS (MEA-8116376); 24 MONTHS \$95,837

TIEN, CHANG-LIN, AND SEBAN, RALPH A; HEAT TRANSFER THROUGH POROUS INSULATION (MEA-8120939); 12 MONTHS \$60,598

CARROLL, MICHAEL M; INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH PROJECT: INELASTIC RESPONSE OF FLUID-FILLED POROUS MATERIALS (SOLID MECHANIC AND MECHANICAL ENGINEERING) (MEA-8200534*); 12 MONTHS \$15,831

UNIVERSITY OF CALIFORNIA, DAVIS

BAUGHN, JAMES W, AND HOFFMAN, M A; TURBULENT HEAT TRANSFER DOWNSTREAM OF AN ABRUPT EXPANSION IN A CIRCULAR TUBE (MEA-8103557); 12 MONTHS \$52,835

UNIVERSITY OF CALIFORNIA, LOS ANGELES

CATTON, IVAN, AND PLESSET, MILTON S; EXPERIMENTAL AND THEORETICAL STUDY OF LARGE AMPLITUDE RAYLEIGH-TAYLOR INSTABILITIES (MEA-8105421); 12 MONTHS \$62,834

SHABAIK, ALY H; OPTIMIZATION OF STEEL FORGABILITY IN THE PRESENCE OF INCLUSIONS (MEA-8111785 A02); 12 MONTHS \$71,798

UNIVERSITY OF CALIFORNIA, SAN DIEGO

FUNG, Y C; CARDIO-PULMONARY DYNAMICS (MEA-797560 A01); 12 MONTHS \$86,087

VAN ATTA, CHARLES W, AND HELLAND, KENNETH N; EXPERIMENTAL STUDIES OF COHERENT STRUCTURE AND SPECTRAL DYNAMICS OF SCALAR AND VELOCITY FIELDS IN TURBULENT FLOWS (MEA-8100431); 12 MONTHS \$101,730

MILES, JOHN W; STUDIES IN GEOPHYSICAL FLUID DYNAMICS AND APPLIED MATHEMATICS (OCE-8117539*); 12 MONTHS \$24,500

UNIVERSITY OF CALIFORNIA, SANTA BARBARA

YUEN, WALTER W; A MODEL OF RADIATIVE HEAT TRANSFER AND SOOT FORMATION IN LAMINAR-JET FLAMES (MEA-8025824 A01); 12 MONTHS \$40,000

AHLERS, GUENTER, AND CANNELL, DAVID S; HYDRODYNAMIC INSTABILITIES AND TURBULENCE (MEA-8117241); 12 MONTHS \$80,000

UNIVERSITY OF SOUTHERN CALIFORNIA

BROWAND, FREDERICK K; INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH: PARTICLE MOTION IN A TURBULENT BOUNDARY LAYER (MEA-7910730 A01*); 12 MONTHS \$42,132

CHENG, HSIEN K, AND MAXWORTHY, TONY; FLUID DYNAMICS OF ANIMAL SWIMMING AND HOVERING (MEA-7926003 A01); 12 MONTHS \$107,624

REDDEKOPP, LARRY G; TURBULENCE AND DETERMINISTIC EVOLUTION MODELS: THEORY AND EXPERIMENT (MEA-8114780); 18 MONTHS \$67,985

LAUB, ALAN J, AND SHIFFLETT, GEOFFREY R; ANALYSIS OF RIGID BODY DISPLACEMENT PARAMETERS FROM IMPRECISE DATA (MEA-8116696); 24 MONTHS \$113,852

COLORADO

UNIVERSITY OF COLORADO AT BOULDER

KASSOY, DAVID R, AND GARY, JOHN M; HEAT AND MASS TRANSFER AT HIGH RAYLEIGH NUMBER IN A WATER SATURATED POROUS MEDIUM (MEA-8011730 A01); 12 MONTHS \$39,836

CONNECTICUT

UNIVERSITY OF CONNECTICUT

BENNETT, J C; RESEARCH INITIATION: INTERACTION OF LARGE-SCALE MOTION WITH A SECONDARY CONTRACTION (MECHANICAL ENGINEERING AND APPLIED MECHANICS) (MEA-8205051); 24 MONTHS \$47,985

DISTRICT OF COLUMBIA

AMERICAN COUNCIL ON EDUCATION

MAGAZINE, ALAN H, DE SIMONE, DANIEL V, AND MOGEE, MARY E; PRIVATE AND GOVERNMENTAL INITIATIVES TO STIMULATE INNOVATION (ENG-8214678); 5 MONTHS \$76,494

NATIONAL ACADEMY OF SCIENCES-NATIONAL RESEARCH COUNCIL

STEVEY, H G, AND HADDAD, TERRIER A; PERFORM A STUDY OF EDUCATION AND UTILIZATION OF THE ENGINEER 1980-2000: STATUS, NEEDS, AND OPPORTUNITIES, PHASE TWO (ENG-8212257*); 12 MONTHS \$62,229

SMITHSONIAN INSTITUTION

FORMAN, PAUL; PARTICIPANT SUPPORT FOR 1982; PRECISION TIME AND TIME INTERVAL (PTT) MEETING, WASHINGTON, D C NOVEMBER 30 DECEMBER 2, 1982 (OBS-8219083*); 12 MONTHS \$2,744

FLORIDA

UNIVERSITY OF MIAMI

VEZIROGLU, T, NEJAT; MULTI-PHASE FLOW AND HEAT TRANSFER SYMPOSIUM - WORKSHOP, APRIL 18-20, 1983 - MIAMI, FLORIDA (MEA-8207453*); 19 MONTHS \$13,464

GEORGIA

GEORGIA INSTITUTE OF TECHNOLOGY MAIN CAMPUS

GIDDENS, DON P; ROLE OF FLUID MECHANICS IN THE GENESIS, PROLIFERATION AND DETECTION OF ATHEROSCLEROSIS (MEA-7921551 A02); 12 MONTHS \$127,936

STRAHLE, WARREN C; PRESSURE VELOCITY CORRELATION IN REACTING TURBULENT FLOWS (MEA-8022366 A01); 12 MONTHS \$68,012

GINSBERG, JERRY H; PROPAGATION OF FINITE AMPLITUDE SOUND BEAMS, WITH APPLICATION TO PARAMETRIC ACOUSTIC ARRAYS (MEA-8101106 A01); 12 MONTHS \$49,984

THOMAS, MICHAEL E; A WORKSHOP ON RESEARCH DIRECTIONS IN INDUSTRIAL ENGINEERING (MEA-8201530); 12 MONTHS \$18,989

ATLURI, SATYA N, AND FITZGERALD, J E; WORKSHOP ON MATERIAL DAMAGE AND FRACTURE, CALLOWAY GARDENS, GEORGIA, NOVEMBER 1982 (MEA-8206907); 12 MONTHS \$23,441

HAWAII

UNIVERSITY OF HAWAII-MANOA

CHENG, PING, FL; FUNDAMENTAL STUDIES OF HEAT AND MASS TRANSFER IN POROUS MEDIA (MEA-8100437 A01); 19 MONTHS \$89,000

ILLINOIS

ILLINOIS INSTITUTE OF TECHNOLOGY

TAO, L N; STUDIES OF MOVING BOUNDARY PROBLEMS (MEA-7921350 A01*); 24 MONTHS \$100,790

ROSENBLAT, SIMON; CONVECTION IN CONTAINERS (MEA-8026808); 12 MONTHS \$47,287

KUMAR, SUDHIR; BASIC INVESTIGATIONS OF METALLIC TRACTIVE ROLLING CONTACT (MEA-8109719 A01); 12 MONTHS \$58,121

NORTHWESTERN UNIVERSITY

DAVIS, STEPHEN H; INTERFACIAL DYNAMICS (MECHANICAL ENGINEERING & APPLIED MECHANICS) (MEA-7921178 A02); 12 MONTHS \$63,890

CHENG, HERBERT S; UNIVERSITY/INDUSTRY COOPERATIVE RESEARCH: AN ANALYTICAL MODEL FOR PREDICTION OF SURFACE PITTING LIFE IN SPIR AND HELICAL GEARS (MEA-7923261 A02*); 12 MONTHS \$80,940

YUEN, M C; THE EFFECT OF CONDENSATION ON STRATIFIED TWO-PHASE FLOW (MEA-8116639); 12 MONTHS \$45,319

LEWIS, JACK L. AND KEER, LEON M; MECHANICAL FAILURE OF CAN-CELLOUS BONE/PMMA INTERFACE (MEA-8117106); 12 MONTHS \$69,436

LAW, CHUNG K; IGNITION AND COMBUSTION OF FUEL SPRAY JETS (MEA-8121779); 12 MONTHS \$30,000

WILSON, WILLIAM R; LUBRICATION IN STEEL COLD ROLLING (MEA-8122106); 12 MONTHS \$88,916

RUBENSTEIN, ALBERT H; PRODUCTIVITY OF THE INTERFACE BETWEEN R&D AND PRODUCTION (MEA-8207373*); 12 MONTHS \$60,499

TRAVEL AWARD

CHATO, JOHN C; TRAVEL TO ATTEND XII EUROPEAN CONFERENCE ON MICROCIRCULATION: JERUSALEM, ISRAEL, SEPTEMBER 5-10, 1982 (MEA-8213280); 6 MONTHS \$1,200

UNIVERSITY OF ILLINOIS AT CHICAGO CIRCLE

QURESHI, ZAFAR H; RESEARCH INITIATION: MEASUREMENTS OF LOCAL HEAT TRANSFER RATES FROM A HORIZONTAL CYLINDER IN MIXED CONVECTION (MEA-8204361); 24 MONTHS \$47,996

UNIVERSITY OF ILLINOIS AT URBANA

BERGMAN, L A; THE RELIABILITY OF LINEAR AND NON-LINEAR OSCILLATORS AND SYSTEMS OF COUPLED OSCILLATORS (MEA-8023263 A01); 12 MONTHS \$42,714

JOHNSON, ROBERT E; PROBLEMS IN LOW-REYNOLDS-NUMBER HYDRODYNAMICS (MEA-8107564); 24 MONTHS \$87,295

BUCKIUS, RICHARD O; THE OPTICAL PATH LENGTH APPROACH TO RADIATION HEAT TRANSFER WITH CONDUCTION AND CONVECTION (MEA-8109250); 24 MONTHS \$86,792

SOCIE, DARRELL F; MULTIAXIAL FATIGUE DESIGN METHODS (MEA-8111282*); 36 MONTHS \$109,813

MARRIOTT, D L, AND MILLER, NORMAN R; A SYSTEMATIC TECHNIQUE FOR FAILURE MODE IDENTIFICATION IN MECHANICAL SYSTEMS (MEA-8119912); 12 MONTHS \$76,027

WEAVER, RICHARD L; MULTIPLE SCATTERING OF WAVES IN RANDOM MEDIA (MEA-8122124); 24 MONTHS \$67,108

CONRY, THOMAS F; THERMAL EFFECTS IN EHD TRACTION (MEA-8205464); 24 MONTHS \$49,909

INDIANA

PURDUE UNIVERSITY

INCROPERA, FRANK P; HYDRODYNAMIC AND THERMAL CONDITIONS IN IRRADIATED LIQUID SUSPENSIONS (MEA-8009034 A01); 12 MONTHS \$69,913

VISKANTA, RAYMOND; BUOYANCY EFFECTS ON HEAT TRANSFER DURING MELTING & SOLIDIFICATION (MEA-8014061 A01); 12 MONTHS \$52,307

LIU, C RICHARD, AND BARASH, MOSHE M; THE STUDY OF THE MECHANISMS AND THE CONSTRUCTION OF MODELS OF RESIDUAL STRESS FORMATION IN MACHINING PARTS (MEA-8021049 A01); 12 MONTHS \$57,653

BAJAJ, ANIL K; BIFURCATIONS IN ROTATIONALLY SYMMETRIC AND PERTURBED MECHANICAL SYSTEMS (MEA-8117086); 24 MONTHS \$49,991

PAUL, RICHARD; ADVANCED INDUSTRIAL ROBOT CONTROL SYSTEMS (MEA-8119884); 24 MONTHS \$364,272

TAYLOR, RAYMOND E; TRANSIENT HEAT FLOW THROUGH HETEROGENEOUS SOLID MATERIALS (MECHANICAL ENGINEERING) (MEA-8204070); 24 MONTHS \$43,234

DOYLE, JAMES F; DEVELOPMENT OF A NEW EXPERIMENTAL METHOD FOR THE STRESS ANALYSIS OF TRANSIENT THERMOELASTIC PROBLEMS IN AXISYMMETRIC BODIES (MECHANICAL ENGINEERING AND APPLIED MECHANICS) (MEA-8206736); 24 MONTHS \$62,060

SOLBERG, JAMES J, ANDERSON, DAVID C, AND PAUL, RICHARD; THE FACTORY OF THE FUTURE: A FRAMEWORK FOR RESEARCH (MEA-8212074); 12 MONTHS \$130,736

UNIVERSITY OF NOTRE DAME

LLOYD, JOHN R, AND YANG, KWANG-TZU; RADIATION CONVECTION INTERACTION IN HEAT TRANSFER (MEA-7918682 A02); 12 MONTHS \$93,559

YANG, KWANG-TZU, AND LLOYD, JOHN R; NATURAL CONVECTION WORKSHOP - BRECKENRIDGE, COLORADO, JULY 18-21, 1982 (MEA-8208948*); 8 MONTHS \$18,000

IOWA

IOWA STATE UNIVERSITY OF SCIENCE & TECHNOLOGY

ZACHARY, LOREN W; USING PHOTOELASTICITY TO DETERMINE ORTHOTROPIC STRESS INTENSITY FACTORS (MEA-8113535); 24 MONTHS \$54,315

UNIVERSITY OF IOWA

CHWANG, ALLEN T; DRAG FORCES ON SLENDER SPHEROIDS AT LOW REYNOLDS NUMBERS (MEA-7910049 A01); 6 MONTHS \$7,106

KENNEDY, JOHN F, AND TATINCLAUX, JEAN-CLAU; THE FORMATION AND MECHANICAL PROPERTIES OF NATURALLY OCCURRING ICE SYSTEMS WITHIN THE CONTEXT OF CIVIL ENGINEERING INTERESTS (CEE-8109252*); 12 MONTHS \$10,000

WEHAGE, ROGER A, NIKRAVESH, PARVIZ E, AND HAUG, EDWARD J; COMPUTER AIDED DESIGN SENSITIVITY ANALYSIS AND OPTIMIZATION OF DYNAMIC MECHANICAL SYSTEMS (MEA-8112947); 24 MONTHS \$69,544

ASKIN, RONALD G; RESEARCH INITIATION: A SIMULATOR FOR DESIGN, EVALUATION AND CONTROL OF PRODUCTION SYSTEMS (MEA-8204617); 24 MONTHS \$47,966

KANSAS

KANSAS STATE UNIVERSITY

FAW, RICHARD E, AND LESTER, THOMAS W; INITIATION OF SUB-COOLED POOL BOILING DURING PRESSURE AND POWER TRANSIENTS (MEA-8102193); 24 MONTHS \$91,938

UNIVERSITY OF KANSAS MAIN CAMPUS

MESLER, RUSSELL B; BUBBLE ENTRAINMENT BY DROP-FORMED VORTEX RINGS (MEA-8118015); 12 MONTHS \$29,998

KENTUCKY

UNIVERSITY OF KENTUCKY

GROSS, TODD S; PLASTIC WORK OF FATIGUE CRACK GROWTH FOR DUCTILE AND BRITTLE GROWTH MECHANISMS (MECHANICAL ENGINEERING AND APPLIED MECHANICS) (MEA-8205535); 24 MONTHS \$48,000

LOUISIANA

LOUISIANA STATE UNIVERSITY, BATON ROUGE

SHARPE, WILLIAM N; ELECTROHYDRAULIC TESTING MACHINE (SOLID MECHANICS & MECHANICAL ENGINEERING) (MEA-8200606); 12 MONTHS \$21,765

SEHITOGLU, HASAN; RESEARCH INITIATION: AN ALTERNATIVE SOLUTION TO THE STATE ESTIMATION PROBLEM (MEA-8205150); 24 MONTHS \$46,211

MARYLAND

JOHNS HOPKINS UNIVERSITY

ERICKSEN, JERALD L; RESEARCH ON NONLINEAR THEORIES OF SOLIDS (MEA-7911112 A02); 12 MONTHS \$66,685

TRUESDELL, CLIFFORD A; RATIONAL THERMOMECHANICS OF MATERIALS (MCS-8015791 A01*); 12 MONTHS \$36,801

CORRSIN, STANLEY; FLUID MECHANICS PROBLEMS RELATED TO BIOLOGICAL FLOW PHENOMENA (MEA-8121227); 12 MONTHS \$80,098

JOHNS HOPKINS UNIVERSITY-SCHOOL OF MEDICINE

GREENE, PETER R; RESEARCH INITIATION: THE VARIABLE COMPLIANCE TREADMILL (MEA-8204736); 24 MONTHS \$46,250

UNIVERSITY OF MARYLAND, COLLEGE PARK

ANTMAN, STUART S; NONLINEAR PROBLEMS OF SOLID MECHANICS (MCS-8001844 A02*); 12 MONTHS \$9,250

SHIH, TIEN-MO; THEORETICAL INVESTIGATION OF TWO-DIMENSIONAL RADIATIVE AND CONDUCTIVE PROBLEMS USING DISCRETIZED-INTENSITY METHOD (MEA-8200062); 12 MONTHS \$25,001

MASSACHUSETTS

CHARLES STARK DRAPER LABORATORY INC

WHITNEY, DANIEL E; PARTS MATING THEORY FOR COMPLIANT PARTS (MEA-7910341 A02); 12 MONTHS \$124,997

DE FAZIO, THOMAS L; PART AND ASSEMBLY TECHNIQUE CLASSIFICATION SUPPLEMENT TO FEEDBACK IN ROBOTICS FOR ASSEMBLY AND MANUFACTURING (MEA-7918530 A01); 5 MONTHS \$20,000

WHITNEY, DANIEL E, AND DE FAZIO, THOMAS L; SHORT AND LONG TERM ROBOT FEEDBACK: MULTI-AXIS SENSING, CONTROL AND UP-DATING (MEA-8207167); 12 MONTHS \$151,985

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

ROHSENOW, WARREN M; POST CRITICAL HEAT FLUX HEAT TRANSFER (MEA-7682564 A03); 2 MONTHS \$8,570

NEWMAN, J N; STUDIES OF SHIP HYDRODYNAMICS AND WATER WAVES (MEA-7717817 A04); 12 MONTHS \$193,456

KAMM, ROGER D, AND SHAPIRO, ASCHER H; A BROAD PROGRAM OF RESEARCH ON FLEXIBLE-WALLED TUBES (MEA-7913092 A02); 12 MONTHS \$110,000

LYON, RICHARD H, AND SEERING, WARREN P; HIGH LEVEL DIAGNOSTICS IN MACHINERY (MEA-8111283); 24 MONTHS \$120,230

BROWN, ROBERT A; THE FLUID MECHANICS OF LIQUID SHELLS (MEA-8116741); 12 MONTHS \$49,262

AKYLAS, TRIANTAPH R; RESEARCH INITIATION: ANALYSIS OF THE NONLINEAR DYNAMICS OF DIRECT RESONANCE INSTABILITY IN SHEAR FLOWS (MECHANICAL ENGINEERING AND APPLIED MECHANICS) (MEA-8204785); 24 MONTHS \$48,000

HARITONIDIS, JOSEPH; RESEARCH INITIATION: AN EXPERIMENTAL STUDY OF TRANSITION IN PIPE FLOW (MECHANICAL ENGINEERING AND APPLIED MECHANICS) (MEA-8204972); 24 MONTHS \$48,000

MELVILLE, W KENDALL; WAVE SHEAR-FLOW INTERACTION (CEE-8240404*); 12 MONTHS \$30,000

DUBOWSKY, STEVEN; THEORETICAL AND EXPERIMENTAL STUDY OF THE DYNAMIC MODELLING OF HIGH SPEED MACHINE SYSTEMS (MEA-8243112); 12 MONTHS \$61,810

NORTHEASTERN UNIVERSITY

ZEID, IBRAHIM; RESEARCH INITIATION: FIXED-POINT ITERATION TO NON-LINEAR FINITE ELEMENT ANALYSIS (MEA-8204774); 24 MONTHS \$47,999

MICHIGAN

MICHIGAN STATE UNIVERSITY

HORGAN, CORNELIUS O. APPLICATION OF QUALITATIVE METHODS IN NONLINEAR ELASTICITY (MEA-7826071 A02; 24 MONTHS \$80,790)
 RADCLIFFE, CLARK J. RESEARCH INITIATION: APPLICATION OF SPECTRAL ANALYSIS TO ACTIVE CONTROL OF MECHANICAL SYSTEMS (MEA-8205008; 24 MONTHS \$47,935)

THOMPSON, BRIAN S. A THEORETICAL AND EXPERIMENTAL INVESTIGATION OF FLEXIBLE MECHANICAL SYSTEMS FABRICATED FROM COMPOSITE MATERIALS (MEA-8216777; 12 MONTHS \$39,736)

MICHIGAN TECHNOLOGICAL UNIVERSITY

EVENSEN, HAROLD A. AND HENDRICKSON, ALFRED A. WORKSHOP: ADVANCES IN IMPACT FORGING (MECHANICAL ENGINEERING) (MEA-8210430; 12 MONTHS \$8,100)

AIFANTIS, ELIAS C. INVESTIGATIONS IN A CERTAIN CLASS OF DIFFUSION AND FLOW PROBLEMS - A CONTINUUM APPROACH (MEA-8214432; 23 MONTHS \$78,835)

TRAVEL AWARD

LUDEMA, KENNETH C. TRAVEL SUPPORT TO LECTURE ON WEAR OF MATERIALS, PEOPLE'S REPUBLIC OF CHINA; AUGUST 29 - SEPTEMBER 24, 1982 (MEA-8212184; 6 MONTHS \$2,200)

UNIVERSITY OF MICHIGAN-ANN ARBOR

ANDERSON, WILLIAM J. AND SANDSTROM, ROBERT E. INVERSE PERTURBATION IN FINITE ELEMENT DYNAMIC ANALYSIS (MEA-8019642 A01; 12 MONTHS \$72,399)

LEE, C. S. GEORG. ADVANCED CONTROL FOR MULTIROBOT ASSEMBLY SYSTEMS (ECS-8108934; 24 MONTHS \$75,000)

KIKUCHI, NOBORU, AND COMMINOU, MARIA. CONTACT PROBLEMS WITH FRICTION: ANALYSIS AND COMPUTATION (MEA-8109221; 24 MONTHS \$81,518)

TRIANTAFYLIDIS, NICOLAS. STABILITY ASPECTS OF LARGE INELASTIC DEFORMATION OF METALS (MEA-8116449; 24 MONTHS \$78,986)

WILSON, RICHARD C. NINTH PRODUCTION RESEARCH CONFERENCE (MEA-8119727 A01; \$2,555)

CLARK, JOHN A. GROUP TRAVEL FOR U.S. PARTICIPANTS IN THE 7TH INTERNATIONAL HEAT TRANSFER CONFERENCE, MUNICH, GERMANY, SEPT. 6-10, 1982 (MEA-8200410; 7 MONTHS \$11,000)

MINNESOTA

UNIVERSITY OF MINNESOTA

GOLDSTEIN, RICHARD J. HEAT TRANSPORT BY THERMAL CONVECTION (MEA-7721626 A04; 12 MONTHS \$63,596)

SERRIN, JAMES B. RESEARCH IN THERMODYNAMICS AND PARTIAL DIFFERENTIAL EQUATIONS (MCS-7903535 A03; 12 MONTHS \$13,750)

SETHNA, P. R. STUDY OF NONLINEAR DYNAMICAL SYSTEMS (MEA-7921351 A02; 12 MONTHS \$57,108)

ARNOLD, ROGER A. THE CORRELATION BETWEEN CAVITATION AND PRESSURE FLUCTUATION IN TURBULENT SHEAR FLOW (MEA-8113562; 12 MONTHS \$55,058)

PATANKAR, S. V. NUMERICAL STUDIES OF FLOW AND HEAT TRANSFER IN PRACTICAL HEAT-EXCHANGE DEVICES (MEA-8116961; 12 MONTHS \$55,816)

ERIKSEN, JERALD L. RESEARCH OF NONLINEAR CONTINUUM MECHANICS (MEA-8211255; 12 MONTHS \$41,570)

UNIVERSITY OF MINNESOTA AT SAINT PAUL

ERDMAN, ARTHUR G. AND RILEY, DONALD R. COMPUTER AIDED TYPE SYNTHESIS OF MECHANISMS (MEA-8120893; 24 MONTHS \$82,938)

MISSOURI

UNIVERSITY OF MISSOURI, COLUMBIA

CHO, UEE WAN. RESEARCH INITIATION: CONSTITUTIVE EQUATIONS FOR MATERIAL CREEP PHENOMENON UNDER VARIABLE MULTIAXIAL STRESS LOADING (MEA-8205032; 24 MONTHS \$48,000)

UNIVERSITY OF MISSOURI, ROLLA

ARMALY, BASSEM F. AND CHEN, TA-SHEN. RESEARCH EQUIPMENT: LASER DOPPLER ANEMOMETER AND SIGNAL PROCESSING SYSTEM (MEA-8111673; 12 MONTHS \$30,128)

CUMMINGS, ALAN. SPECIALIZED ACOUSTICAL RESEARCH EQUIPMENT (MEA-8112330; 12 MONTHS \$28,624)

CROSBIE, ALFRED L. MULTIPLE SCATTERING IN A TWO-DIMENSIONAL CYLINDRICAL GEOMETRY (MECHANICAL ENGINEERING) (MEA-8121430; 12 MONTHS \$40,008)

WASHINGTON UNIVERSITY

ZAHALAK, GEORGE I. THE MECHANICAL BEHAVIOR OF HUMAN SKELETAL MUSCLE IN VIVO (MEA-7920332 A02; 12 MONTHS \$46,721)

HAHN, H. T. MICROMECHANICS OF FATIGUE FAILURE IN COMPOSITES (MEA-8110777; 12 MONTHS \$89,749)

NEW JERSEY

NEW JERSEY INSTITUTE OF TECHNOLOGY

HRZAK, PETER. HEAT TRANSFER EFFECTS FROM ARRAYS OF NOZZLES (MEA-8119671; 24 MONTHS \$120,213)

PRINCETON UNIVERSITY

CHENG, SIN-I. COMPUTATIONAL STUDY OF SHEAR TURBULENCE (MEA-8010876 A01; 12 MONTHS \$32,000)

CAUDILL, REGGIE J. AND KORNHAUSER, ALAIN L. REALIZATION AND MICROPROCESSOR IMPLEMENTATION OF CONTROL LAWS FOR AUTOMATED VEHICLE SYSTEMS (MEA-8012290 A01; 12 MONTHS \$56,090)

DOWELL, EARL H. DYNAMICS OF NONLINEAR AND NONCONSERVATIVE SYSTEMS USING COMPONENT MODE ANALYSIS (MEA-8119883; 12 MONTHS \$45,790)

RUTGERS UNIVERSITY-BUSCH CAMPUS

LEE, TING W. DESIGN OF HIGH-SPEED MECHANISMS (MEA-8006783 A02; 12 MONTHS \$33,105)

RUTGERS UNIVERSITY

MULLER, MICHAEL R. AND PESKIN, RICHARD L. AN EXPERIMENTAL INVESTIGATION OF THE DYNAMICS OF A BUOYANT THERMAL IN A ROTATING SOURCE-SINK ANNULUS (MEA-8016310 A01; 12 MONTHS \$56,961)

NEW YORK

AMERICAN SOCIETY OF MECHANICAL ENGINEERS

REID, KARL N. WORKSHOP ON THE STATE-OF-THE-ART AND FUTURE AREAS OF NEED IN MECHANICAL ENGINEERING RESEARCH (MEA-8119616; 12 MONTHS \$44,780)

CLARKSON COLLEGE OF TECHNOLOGY

LIN, SUNG P. AND HOLLWORTH, BRUCE. HEAT TRANSFER FROM A WIRE IN A VIOLENTLY FLUCTUATING ENVIRONMENT, WITH APPLICATION TO A HEAT SENSING ACCELEROMETER (MECHANICAL ENGINEERING) (MEA-8120641; 24 MONTHS \$84,000)

CORNELL UNIVERSITY

LEIBOVICH, SIDNEY. NONLINEAR STABILITY THEORY AND THE LARGE AMPLITUDE TRANSITIONS OF CONCENTRATED VORTEX FLOWS (MEA-7919817 A02; 12 MONTHS \$100,000)

JIRKA, GERHARD H. AND CAUGHEY, DAVID A. TWO-DIMENSIONAL TRANSCRITICAL STRATIFIED FLOW (MEA-8012632 A01; 12 MONTHS \$71,321)

HOLMES, PHILIP J. QUALITATIVE ANALYSIS OF DYNAMICAL PROBLEMS IN NONLINEAR MECHANICS (MEA-8017570 A01; 12 MONTHS \$27,167)

WARHAFT, ZELLMAN. EXPERIMENTS ON MIXING AND TRANSPORT OF SCALARS IN TURBULENT FLOWS (MEA-8104733; 24 MONTHS \$90,795)
 PAO, YIH-HSING. NINTH U.S. NATIONAL CONGRESS OF APPLIED MECHANICS (OBA-8118159; 8 MONTHS \$11,388)

CORNELL UNIVERSITY-CORNELL UNIVERSITY - ENDOWED

TORRANCE, KENNETH E. AND TURCOTTE, DONALD L. TWO-PHASE THERMAL CONVECTION IN A POROUS MEDIUM (MEA-7823542 A02; 24 MONTHS \$122,881)

NELKIN, MARK S. STATISTICAL PHYSICS OF TURBULENCE (MEA-7902942 A02; 12 MONTHS \$33,152)

DAWSON, PAUL R. STRAIN-DEPENDENT VISCOPLASTIC PRIMARY FORMING MODELS (MEA-8105605 A01; 12 MONTHS \$47,590)

MOON, FRANCIS C. KRAMER, EDWARD J. AND IWASA, YUKIKAZU. WAVE PROPAGATION AND ACOUSTIC EMISSION IN SUPERCONDUCTING MATERIALS AND MAGNETS (MEA-8111241; 24 MONTHS \$210,970)

SACHSE, WOLFGANG H. AND PAO, YIH-HSING. FURTHER STUDIES IN ACOUSTIC EMISSIONS (MEA-8117988; 24 MONTHS \$218,485)

MUCKSTADT, JOHN A. MODELS FOR PLANNING AND CONTROLLING PRODUCTION IN MULTI-STAGE PRODUCTION SYSTEMS FOR DISCRETE PARTS (INDUSTRIAL ENGINEERING) (MEA-8121429; 12 MONTHS \$80,275)

WANG, K. K. COMPUTER-AIDED DESIGN AND FABRICATION OF MOLDS, AND COMPUTER CONTROL OF INJECTION MOLDING (MECHANICAL ENGINEERING) (MEA-8200743; 12 MONTHS \$191,881)

HUI, CHUNG-YUE. RESEARCH INITIATION: FRACTURE INDUCED BY ELECTROMAGNETIC FORCES (MEA-8204675; 24 MONTHS \$47,871)

HART, EDWARD W. TESTING OF METALS UNDER MULTIAXIAL LOADING (MECHANICAL ENGINEERING AND APPLIED MECHANICS) (MEA-8208224; 18 MONTHS \$112,845)

GENERAL ELECTRIC COMPANY-RESEARCH AND DEVELOPMENT CENTER

SUNDELL, ROBERT E. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH: MINOR ELEMENT EFFECTS ON GAS TUNGSTEN ARC (GTA) WELD PENETRATION (MEA-8208950; 12 MONTHS \$100,000)

NEW YORK ACADEMY OF SCIENCES

LEVICH, BENJAMIN. CONFERENCE ON PHYSICO-CHEMICAL HYDRODYNAMICS IV; JUNE 14-17, 1982; NEW YORK CITY (CPE-8120567; 12 MONTHS \$2,500)

POLYTECHNIC INSTITUTE OF NEW YORK

MIJOVIC, JOVAN. FATIGUE INDUCED AND TIME-DEPENDENT CHANGES IN THERMOMECHANICAL PROPERTIES OF HYBRID COMPOSITE LAMINATES (MEA-8120311; 24 MONTHS \$129,751)

RENSSELAER POLYTECHNIC INSTITUTE

KREMPL, ERHARD. INELASTIC CONSTITUTIVE EQUATIONS WITH MEASURES OF INTERNAL CHANGE (MEA-7909156 A02; 12 MONTHS \$86,390)

MOW, VAN C. AND LAI, W. MICHAEL. BIOMECHANICS OF DIARTHRODIAL JOINTS (MEA-7915524 A02; 12 MONTHS \$122,084)

TICHY, JOHN A. HEAT TRANSFER AND PRESSURE DROP IN CONDENSING AND EVAPORATING MULTICOMPONENT FLUIDS (MEA-8005706 A01; 12 MONTHS \$54,844)

JONES, OWEN C. AND LAHEY, RICHARD T. THREE-DIMENSIONAL TURBULENCE STRUCTURE MEASUREMENTS IN A TWO-PHASE FLOW (MECHANICAL ENGINEERING) (MEA-8012953 A01; 12 MONTHS \$78,900)

HOLMES, MARK H. MATHEMATICAL PROBLEMS ARISING FROM HYDROELASTIC SYSTEMS (MCS-8102129 A01; 12 MONTHS \$8,000)

SOMERSCALES, EUAN F C; CORROSION FOULING: THE EFFECT OF CORROSION ON HEAT TRANSFER (MEA-8106429; 24 MONTHS \$80,000)
 TIERSTEN, HARRY F; MECHANICS OF INTERPENETRATING SOLID CONTINUA (MEA-8115340; 24 MONTHS \$137,909)

DIPRIMA, RICHARD C, AND GARG, VIJAY K; THE EFFECT OF HEATING AND COOLING ON LINEAR AND NONLINEAR GORTLER INSTABILITY ON CONCAVE SURFACES (MATHEMATICAL SCIENCES) (MCS-8201340*; 12 MONTHS \$5,000)

STATE UNIVERSITY AT BUFFALO

FELSKE, JAMES D; OPTICAL PROPERTIES OF SOOT PARTICLES IN PROPANE AND SYNTHETIC FUEL FLAMES (MEA-8112539; 24 MONTHS \$102,121)

STATE UNIVERSITY AT STONY BROOK

CHIANG, FU-PEN; SPECKLE AND MOIRE METHODS FOR EXPERIMENTAL STRESS ANALYSIS (MEA-8009047 A02; 12 MONTHS \$84,567)

UNIVERSITY OF ROCHESTER

WEYMANN, HELMUT D; STABILITY OF A ROTATING FLUID FLOW (MEA-8100451; 24 MONTHS \$99,500)

NORTH CAROLINA

NORTH CAROLINA STATE UNIVERSITY AT RALEIGH

OZISIK, M NECATI; MULTIDIMENSIONAL RADIATIVE HEAT TRANSFER IN PARTICIPATING MEDIA (MEA-8110705; 24 MONTHS \$83,402)

BRYANT, MICHAEL D; THERMAL AND THERMOELASTIC EFFECTS IN ELECTRICAL BRUSHES (MEA-8207137; 24 MONTHS \$50,000)

OHIO

BATTELLE MEMORIAL INSTITUTE

ALTAN, TAYLAN; COMPUTER AIDED METHODS FOR WARM FORGING OF STEEL PARTS (MEA-8112622 A01; 12 MONTHS \$99,996)

CASE WESTERN RESERVE UNIVERSITY-CASE INSTITUTE OF TECHNOLOGY

ANGUS, JOHN C, AND LANDAU, UZIEL; FORMATION OF THREE DIMENSIONAL ELECTROPLATED SURFACE (MECHANICAL ENGINEERING) (MEA-8211792; 12 MONTHS \$73,040)

CASE WESTERN RESERVE UNIVERSITY

TIEN, JAMES S; DIFFUSION FLAME SPREAD (MEA-8115339; 12 MONTHS \$46,200)

OHIO STATE UNIVERSITY

TOUGH, JAMES T; SUPERFLUID TURBULENCE (DMR-7925089 A02*; 12 MONTHS \$10,000)

SRINIVASAN, K; MICROCOMPUTER CONTROL OF MACHINE TOOL FEED DRIVES (MEA-8105532 A01; 12 MONTHS \$38,950)

OZ, HAYRANI; RESEARCH INITIATION: INDEPENDENT MODAL-SPACE CONTROL OF FLEXIBLE SYSTEMS (MEA-8204920; 24 MONTHS \$48,000)

UNIVERSITY OF CINCINNATI-COLLEGE OF MEDICINE

BUTLER, DAVID L, AND STOFFER, DONALD C; AN EXAMINATION OF THE ANTERIOR AND POSTERIOR CRUCIATE LIGAMENTS IN THE HUMAN KNEE (MEA-8118140; 12 MONTHS \$100,366)

UNIVERSITY OF CINCINNATI

HUSTON, RONALD L; MULTIBODY DYNAMICS INCLUDING THE EFFECTS OF FLEXIBILITY AND COMPLIANCE (MEA-8101110 A01; 12 MONTHS \$55,386)

UNIVERSITY OF TOLEDO

KRAMER, STEVEN N; EXTENSION OF THE SELECTIVE PRECISION SYNTHESIS METHOD TO THE DESIGN AND OPTIMIZATION OF MACHINES AND MECHANISMS (MEA-8201852; 24 MONTHS \$50,000)

OKLAHOMA

OKLAHOMA STATE UNIVERSITY

SONI, A H; THREE DIMENSIONAL KINEMATIC ANALYSIS AND SYNTHESIS OF TANGENT PLANE MOTION (MEA-8119133; 12 MONTHS \$44,290)

OREGON

OREGON STATE UNIVERSITY

ADAMS, RONALD L; THE RADIATIVE CONTRIBUTION TO HEAT TRANSFER BETWEEN A HIGH TEMPERATURE FLUIDIZED BED AND AN IMMERSED TUBE (MECHANICAL ENGINEERING) (MEA-8020781 A01; 12 MONTHS \$54,959)

FICHTER, EUGENE F, AND MCDOWELL, EDWARD D; INVESTIGATION OF A NOVEL ROBOT ARM (MEA-8121403; 12 MONTHS \$49,134)

PORTLAND STATE UNIVERSITY

SPOLEK, GRAIG A; RESEARCH INITIATION: DETERMINATION OF UNSATURATED WOOD PERMEABILITY BY TRANSIENT FLOW METHODS (MEA-8205193; 24 MONTHS \$48,000)

UNIVERSITY OF OREGON - EUGENE

DONNELLY, RUSSELL J; EXPERIMENTAL AND THEORETICAL RESEARCH IN FLUID DYNAMICS (MEA-8117569; 12 MONTHS \$68,956)

PENNSYLVANIA

CARNEGIE-MELLON UNIVERSITY-CARNEGIE INSTITUTE OF TECHNOLOGY

SOMMER, HOLGER T; HIGH SPEED PHOTOGRAPHIC RECORDING AND ANALYZATION EQUIPMENT (MECHANICAL ENGINEERING) (MEA-8203295*; 12 MONTHS \$61,078)

AYRES, ROBERT U, AND WRIGHT, PAUL K; AN ECONOMIC ASSESSMENT OF SENSOR BASED ROBOTS (MECHANICAL ENGINEERING) (MEA-8205437; 24 MONTHS \$188,905)

CARNEGIE-MELLON UNIVERSITY

YAO, SHI-CHUNE; STUDY ON SPRAY COOLING HEAT TRANSFER (MEA-8111677; 24 MONTHS \$136,771)

HOBURG, JAMES F; ELECTROHYDRODYNAMIC AUGMENTATION OF HEAT TRANSFER (MECHANICAL ENGINEERING) (MEA-8118449; 12 MONTHS \$30,000)

DREXEL UNIVERSITY

TSOU, FU KANG; EXPERIMENTAL STUDIES OF INJECTION STREAM TURBULENCE IN FILM COOLING (MEA-8117382*; 12 MONTHS \$55,452)

DYNA EAST CORPORATION

CARLEONE, JOSEPH; NUMERICALLY CONTROLLED PRECISION ORBITAL-FORGING PROCESS (MEA-8115012 A01*; \$45,589)

HAVERFORD COLLEGE

GOLLUB, JERRY P; STOCHASTIC FLOW AND NONLINEAR DYNAMICS (MECHANICAL ENGINEERING AND APPLIED MECHANICS) (MEA-7912150 A02; 12 MONTHS \$72,320)

LEHIGH UNIVERSITY

LEVY, EDWARD K, AND KADAMBI, VEDANTH; HEAT TRANSFER IN ROTATING AND CURVED DUCTS (MECHANICAL ENGINEERING) (MEA-7923751 A02*; 12 MONTHS \$78,763)

SALATHE, ERIC P; MICROCIRCULATORY FLOW: A STUDY OF FLUID MOVEMENT IN COMPLEX POROUS STRUCTURES (MEA-8006782 A02; 12 MONTHS \$50,935)

WALKER, J D, AND SMITH, CHARLES R; INDUSTRY/UNIVERSITY CO-OPERATIVE GRANT: SEPARATED FLOW EFFECTS ON THE TURBINE BLADE HEAT TRANSFER (MEA-8016829 A01*; 12 MONTHS \$100,000)

RIVLIN, RONALD S; STUDIES IN NON-LINEAR CONTINUUM PHYSICS (MCS-8026567 A01*; 12 MONTHS \$16,000)

ROCKWELL, DONALD O; VORTEX-LEADING EDGE INTERACTIONS (MEA-8114352; 12 MONTHS \$79,165)

BLTYHE, PHILIP A; INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH: THERMAL CONVECTION IN CAVITIES WITH APPLICATIONS TO CRYSTAL GROWTH AND OTHER PROBLEMS (MEA-8115333*; 12 MONTHS \$18,188)

PENNSYLVANIA STATE UNIVERSITY

TARBELL, JOHN M; PERIODIC FLOW IN CURVED TUBES (MEA-8010878 A01; 12 MONTHS \$47,149)

SCHMIDT, FRANK W; HIGH RAYLEIGH NUMBER NATURAL CONVECTION IN AN ENCLOSURE (MECHANICAL ENGINEERING) (MEA-8025162 A01; 12 MONTHS \$49,939)

O'BRIEN, JAMES E; RESEARCH INITIATION: PHOTOGRAPHICALLY MEASURED LOCAL MASS TRANSFER ON MODEL HEAT TRANSFER SURFACES (MEA-8204580; 24 MONTHS \$48,000)

TRAVEL AWARD

BAKER, C B; TRAVEL TO ATTEND VII INTERNATIONAL HEAT TRANSFER CONFERENCE, MUNICH, GERMANY, SEPTEMBER 6-10, 1982 (MEA-8211511; 6 MONTHS \$800)

UNIVERSITY OF PENNSYLVANIA

AYYASWAMY, PORTONOVO; LAMINAR FILM CONDENSATION ON A DROPLET TRANSLATING IN A STEAM-AIR MIXTURE (MEA-8023861 A01; 12 MONTHS \$45,770)

PAUL, BURTON; NONHERTZIAN CONTACT EFFECTS ON ROLLING CREEPAGE (MEA-8115808; 12 MONTHS \$64,784)

SOLER, ALAN I; ANALYSIS AND DESIGN OF PRESSURE VESSEL BOLTED FLANGES WITH NONLINEAR GASKET MATERIALS (MECHANICAL ENGINEERING) (MEA-8120347; 12 MONTHS \$60,559)

GEBHART, BENJAMIN; BUOYANCY INDUCED TRANSPORT IN COLD WATER AND WITH MULTIPLE BUOYANCY COMPONENTS (MEA-8200813*; 12 MONTHS \$64,634)

BOGEN, DANIEL K; RESEARCH INITIATION: PASSIVE ELASTIC PROPERTIES OF NORMAL AND INFARCTED HEART MUSCLE (MEA-8204783; 24 MONTHS \$48,000)

RHODE ISLAND

BROWN UNIVERSITY

LIU, JOSEPH T; STUDIES OF SHEAR FLOW INSTABILITIES (MEA-7822127 A03; \$5,520)

LIU, JOSEPH T; STUDIES OF SHEAR FLOW INSTABILITIES (MECHANICAL ENGINEERING AND APPLIED MECHANICS) (MEA-7822127 A04; 12 MONTHS \$59,868)

CLIFTON, RODNEY J; FUNDAMENTAL STUDIES IN DYNAMIC PLASTICITY BY MEANS OF PLANE WAVE EXPERIMENTS (MEA-7910633 A03; 12 MONTHS \$95,322)

DUFFY, J; THE MECHANICAL BEHAVIOR OF POLYCRYSTALLINE AND SINGLE CRYSTAL METALS BASED ON EXPERIMENTS INVOLVING INCREMENTS IN STRAIN RATE AND TEMPERATURE (MEA-7923742 A02; 12 MONTHS \$87,185)

AREF, HASSAN; DYNAMICS AND STATISTICS OF POINT VORTICES (MEA-8116910; 24 MONTHS \$64,689)

KOLSKY, HERBERT, AND PIPKIN, ALLEN C; IMPULSIVE LOADING OF FIBER-REINFORCED SIMPLE STRUCTURES (MECHANICAL ENGINEERING AND APPLIED MECHANICS) (MEA-8200938; 24 MONTHS \$185,959)

GORDON RESEARCH CONFERENCES

CRUICKSHANK, ALEXANDER M. CONFERENCE ON ORTHOPAEDIC SCIENCES AND BIOENGINEERING. MERIDAN, NEW HAMPSHIRE, AUGUST, 1982 (MEA-8120201); 12 MONTHS \$4,000

UNIVERSITY OF RHODE ISLAND

SHUKLA, ARUN, AND DALLY, JAMES W. DYNAMIC FRACTURE BEHAVIOR OF SOLIDS ASSOCIATED WITH HIGH VELOCITY CRACK PROPAGATION (SOLID MECHANICS AND MECHANICAL ENGINEERING) (MEA-8204277); 24 MONTHS \$101,520

KELLEY, ROBERT E. UNIVERSITY/INDUSTRY COOPERATIVE RESEARCH CENTER IN ROBOTICS (011-8203570*); 12 MONTHS \$80,000

SOUTH CAROLINA

CLEMSON UNIVERSITY

FIGLIOLA, RICHARD S. RESEARCH INITIATION: AN EXPERIMENTAL STUDY OF BUOYANCY DRIVEN CONVECTION WITHIN VERTICAL CYLINDERS (MEA-8205244); 24 MONTHS \$48,000

TENNESSEE

UNIVERSITY OF TENNESSEE AT KNOXVILLE

PERONA, JOSEPH J. EXPERIMENTAL STUDY OF DIRECT CONTACT BOILING (MEA-8024396 A01); 12 MONTHS \$48,200

PARSONS, J. ROGER. RESEARCH INITIATION: AN EXPERIMENTAL INVESTIGATION OF SOME PERTINENT ASPECTS OF TRANSIENT NATURAL CONVECTION FROM ROD BUNDLES (MEA-8204884); 24 MONTHS \$47,989

TEXAS

RICE UNIVERSITY

DOUGLAS, ANDREW S. RESEARCH INITIATION: THE EFFECTS OF TEMPERATURE AND RATE SENSITIVITY IN DYNAMIC CRACK PROPAGATION (MEA-8205319); 24 MONTHS \$47,464

TEXAS A & M UNIVERSITY

VANCE, JOHN M. AND NOAH, SHERIF T. INVESTIGATION OF LOAD-INDUCED ROTORDYNAMIC INSTABILITIES IN TURBOMACHINERY (MEA-8115330); 24 MONTHS \$118,622

HAN, JE-CHIN. RESEARCH INITIATION: HEAT TRANSFER AND FRICTION IN RECTANGULAR CHANNELS WITH TWO SMOOTH AND TWO OPPOSING RIBBOUGHENED WALLS (MEA-8205234); 24 MONTHS \$47,643

NOAH, SHERIF T. KETTLEBOROUGH, CHARLES F. AND GRIFFIN, RICHARD B. PREDICTION OF IMPACT WEAR AND FRETTING OF MECHANICAL SYSTEMS CONTAINING CLEARANCES (MEA-8211288); 12 MONTHS \$100,488

UNIV OF TEXAS AT AUSTIN

SWINNEY, HARRY L. INSTABILITIES, TURBULENCE, AND CRITICAL PHENOMENA IN FLUID FLOWS (MEA-7905585 A02*); 12 MONTHS \$73,500

DILLER, KENNETH R. COUPLED HEAT AND MASS TRANSPORT DURING SOLUTION SOLIDIFICATION (MEA-8024267 A01); 12 MONTHS \$54,881

MASADA, GLENN Y. RESEARCH INITIATION: MATHEMATICAL MODEL AND CONTROL OF A COAL PULVERIZER (MEA-8204804); 24 MONTHS \$48,000

UNIVERSITY OF HOUSTON CENTRAL CAMPUS

WITTE, LARRY C. AN EXPERIMENTAL STUDY OF VAPOR FILM INSTABILITY (MEA-8008016 A01); 12 MONTHS \$51,455

HUSSAIN, AKM FAZLE. SOME BASIC INVESTIGATIONS IN TURBULENT SHEAR FLOWS (MEA-8111676); 12 MONTHS \$100,513

UTAH

TERRA TEK INC

SCHATZ, JOHN F. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH PROJECT: INELASTIC RESPONSE OF FLUID-FILLED POROUS MATERIALS (SOLID MECHANICS AND MECHANICAL ENGINEERING) (MEA-8213134*); 12 MONTHS \$32,834

VIRGINIA

OLD DOMINION UNIVERSITY

LAU, S. C. RESEARCH INITIATION: AN EXPERIMENTAL STUDY OF ENDWALL SURFACE HEAT TRANSFER IN A LARGE-SCALE TURBINE BLADE CASCADE VIA THE NAPHTHALENE SUBLIMATION TECHNIQUE (MEA-8205100); 24 MONTHS \$43,326

UNIVERSITY OF VIRGINIA

FLACK, RONALD D. AND BARRETT, LLOYD E. EXPERIMENTAL INVESTIGATION OF PRESSURES IN MULTILAYER BEARINGS (MEA-8105493 A01); 12 MONTHS \$43,148

VIRGINIA POLYTECHNIC INSTITUTE

POST, DANIEL. EXTENSION OF MOIRE INTERFEROMETRY TECHNIQUES FOR ENGINEERING MEASUREMENTS (MEA-8109230); 24 MONTHS \$120,000

SMITH, C. W. AND POST, DANIEL. AN INTEGRATED PHOTOELASTIC/MOIRE/COMPUTER GRAPHICS METHOD FOR THREE DIMENSIONAL FINITE CRACKED BODY STUDIES (MEA-8115565); 24 MONTHS \$170,000

HERBERT, THORWALD, AND SARIC, WILLIAM S. NONLINEAR MECHANISMS IN UNSTABLE PLANE POISEUILLE FLOW (MECHANICAL ENGINEERING AND APPLIED MECHANICS) (MEA-8120935); 24 MONTHS \$132,618

WASHINGTON

BATTELLE MEMORIAL INSTITUTE-BATTELLE NORTHWEST LABORATORIES

JONES, RUSSELL H. EVALUATE CHEMICALLY ASSISTED MACHINING PROCESSES (MECHANICAL ENGINEERING) (MEA-8307140); 9 MONTHS \$34,200

UNIVERSITY OF WASHINGTON

BERG, JOHN C. SPREADING OF OIL FILMS ON WATER IN THE SURFACE TENSION REGIME (MEA-8109226*); 12 MONTHS \$53,200

WASHINGTON STATE UNIVERSITY

PLUMB, OVID A. HEAT, MASS AND MOMENTUM TRANSPORT IN POROUS MATERIALS - APPLICATION TO WOOD DRYING (MEA-7906367 A02); 12 MONTHS \$43,942

GROSSHANDLER, WILLIAM L. RADIATIVE HEAT TRANSFER IN NON-HOMOGENEOUS COMBUSTION PRODUCTS (MEA-8101953); 24 MONTHS \$135,103

WEST VIRGINIA

WEST VIRGINIA UNIVERSITY

SALAMON, NICHOLAS J. NUMERICAL SOLUTION OF CONTACT PROBLEMS (MEA-8112535); 24 MONTHS \$82,946

WISCONSIN

UNIVERSITY OF WISCONSIN-MADISON

LODGE, ARTHUR S. STRESS TRANSIENTS IN ELASTIC LIQUIDS OF HIGH VISCOSITY (MEA-7824180 A02); 12 MONTHS \$70,352

VAN SCIVER, STEVEN W. STABILIZATION OF SUPERCONDUCTING MAGNETS IN HE II - HEAT TRANSFER ASPECTS (MEA-8011583 A01); 12 MONTHS \$62,315

ROWLANDS, R. E. AND JOHNSON, MILLARD W. ANALYTICAL EXPERIMENTAL BEHAVIOR OF NONLINEAR ORTHOTROPIC MEDIA (MEA-8120393); 12 MONTHS \$80,825

MEYER, RICHARD E. ADVANCED SEMINAR ON THE THEORY OF DISPERSED MULTIPHASE FLOW; MADISON, WISCONSIN, MAY 26-28, 1982 (CPE-8203292*); 12 MONTHS \$5,000

EMAN, KORNEI F. RESEARCH INITIATION: DEVELOPMENT OF A PREDICTIVE CHATTER SUPPRESSION CONTROLLER (MEA-8204965); 24 MONTHS \$48,000

DUFFIE, N. A. AND HALLDIN, GEORGE W. THE USE OF TACTILE SENSING AND COMPUTER GRAPHICS IN THE AUTOMATION OF MOLD PRODUCTION FOR PLASTICS PROCESSING (MEA-8210209); 12 MONTHS \$234,210

UNIVERSITY OF WISCONSIN-MILWAUKEE

CHAN, SHIH H. TRANSIENT FOULING HEAT TRANSFER AND SCALE REMOVAL (MEA-8004360 A02); 12 MONTHS \$56,847

JENSEN, MICHAEL K. THE EFFECT OF TWISTED-TAPE SWIRL GENERATORS ON SATURATED FORCED-CONVECTION BOILING HEAT TRANSFER (MECHANICAL ENGINEERING) (MEA-8117226); 12 MONTHS \$30,000

KAVIANY, MASSOUD. RESEARCH INITIATION: EFFECT OF A STABILIZING GRADIENT OF SOLUTE ON THE ONSET OF THERMAL CONVECTION (MEA-8204837); 24 MONTHS \$47,985

INTERDISCIPLINARY RESEARCH

CALIFORNIA

UNIVERSITY OF CALIFORNIA, SANTA BARBARA

SMITH, TERENCE R. WORKSHOP IN NONLINEAR DECISION SYSTEMS (OIR-8212817); 12 MONTHS \$28,698

FLORIDA

UNIVERSITY OF FLORIDA

CHILDERS, DONALD G. AND MOORE, G. PAUL. VOCAL FOLD VIBRATION AND SPEECH (ECS-8116341*); 12 MONTHS \$36,000

GEORGIA

GEORGIA INSTITUTE OF TECHNOLOGY MAIN CAMPUS

PORTER, ALAN L. REVIEW OF THE PROCESSES OF INTERDISCIPLINARY RESEARCH (OIR-8209893); 12 MONTHS \$46,286

ILLINOIS

NORTHWESTERN UNIVERSITY

BUTLER, JON T. AN IMPROVED MODEL FOR THE DIAGNOSIS OF FAULTS IN A MULTIPROCESSING SYSTEM (ECS-8203276*); 24 MONTHS \$14,500

UNIVERSITY OF ILLINOIS AT URBANA

RINEHART, KENNETH L. PURCHASE OF A H_{α} FIELD FAST ATOM BOMBARDMENT MASS SPECTROMETER (PCM-812, 594*); 12 MONTHS \$10,000

INDIANA

PURDUE UNIVERSITY

SNYDER, LAWRENCE, SIEGEL, LEAH J. SIEGEL, HOWARD J. AND GANNON, DENNIS. WORKSHOP ON ALGORITHMICALLY SPECIALIZED COMPUTER ORGANIZATIONS - PURDUE UNIVERSITY ON SEPTEMBER 29 OCTOBER 1, 1982 (ECS-8206181*); 6 MONTHS \$15,000

IOWA

UNIVERSITY OF IOWA

DANIELS, LACY; *PRODUCTION OF CHEMICALS AND FUELS FROM SYNTHESIS GAS USING BIOCATALYSIS* (PCM-8207809*); 18 MONTHS \$10,000

MARYLAND

UNIVERSITY OF MARYLAND, COLLEGE PARK

HATCH, RANDOLPH T., CADMAN, THEODORE W., AND COOK, THOMAS M.; *INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: DEVELOPMENT OF CONTINUOUS, MIXED CULTURE PROCESSES* (CPE-8016547 A01*); 12 MONTHS \$10,000

MASSACHUSETTS

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

SINSKEY, ANTHONY J.; *PUBLISHING OF MIT 10TH ANNUAL SEA GRANT LECTURE - BIOTECHNOLOGY AND GENETIC ENGINEERING IN THE MARINE SCIENCE* (CPE-8210818*); 12 MONTHS \$1,500

NEW YORK

UNITED ENGINEERING TRUSTEES INC

VENKATASUBRAMAN, K.; *THIRD INTERNATIONAL RESEARCH CONFERENCE ON BIOCHEMICAL ENGINEERING*; SANTA BARBARA, CALIFORNIA; SEPTEMBER 19-24, 1982 (CPE-8210605*); 12 MONTHS \$3,000

OHIO

OHIO STATE UNIVERSITY

BERME, N., KLEIN, C. A., AND KOOZEKANANI, SAID H.; *DYNAMICS AND CONTROL OF KINEMATICALLY REDUNDANT ROBOTIC AND BIOLOGICAL SYSTEMS* (ECS-8121519*); 12 MONTHS \$30,000

PENNSYLVANIA

CARNEGIE-MELLON UNIVERSITY

BISIANI, ROBERTO, AND REDDY, RAJ; *WORKSHOP ON COMPUTER ENGINEERING FOR ROBOTICS*, PITTSBURGH, PENNSYLVANIA; MARCH 1982 (ECS-8200228*); 6 MONTHS \$10,000

RHODE ISLAND

UNIVERSITY OF RHODE ISLAND

KELLEY, ROBERT E.; *UNIVERSITY/INDUSTRY COOPERATIVE RESEARCH CENTER IN ROBOTICS* (011-8203570*); 12 MONTHS \$22,000

UTAH

UNIVERSITY OF UTAH

OLSON, FERRON A.; *WORKSHOP-CYANIDE AND ORGANIC EFFLUENTS FROM MINERAL PROCESSING* (OIR-8119007 A02); 5 MONTHS \$4,000

VIRGINIA

RUMSON CORPORATION

KAPLAN, ROBERT L.; *DETERMINING FLOOD HAZARD MITIGATION POLICY AND RESEARCH PRIORITIES* (OIR-8119817 A01); 1 MONTHS \$3,931

WASHINGTON

UNIVERSITY OF WASHINGTON

HUTCHINSON, THOMAS E.; *ELECTRON PROBE ANALYSIS* (PCM-8202449*); 24 MONTHS \$10,000

WISCONSIN

UNIVERSITY OF WISCONSIN-MADISON

HONG, RICHARD; *PLANNING FOR AN INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH CENTER IN HYBRIDOMA TECHNOLOGY* (ISI-8213492*); 12 MONTHS \$10,000

BIOLOGICAL, BEHAVIORAL AND SOCIAL SCIENCES

PHYSIOLOGY, CELLULAR AND MOLECULAR BIOLOGY

ALABAMA

UNIVERSITY OF ALABAMA IN BIRMINGHAM-MEDICAL COLLEGE OF ALABAMA

WELLS, ROBERT D; STUDIES WITH DEFINED DEOXYRIBONUCLEIC ACIDS (PCM-8212705); 16 MONTHS \$15,500

UNIVERSITY OF ALABAMA IN BIRMINGHAM

BISHOP, DAVID H; ACQUISITION OF EQUIPMENT FOR RESEARCH IN VIROLOGY (PCM-8114934); 12 MONTHS \$80,000

HARVEY, STEPHEN C; CONFORMATIONAL DYNAMICS OF TRANSFER RNA (PCM-8118827); 12 MONTHS \$50,000

GRIFFIN, FRANK M; FUNCTIONS OF MACROPHAGE COMPLEMENT RECEPTORS (PCM-8202455); 12 MONTHS \$57,000

PRITCHARD, DAVID G; CHARACTERIZATION OF THE GROUP-SPECIFIC POLYSACCHARIDES OF GROUPS B, E, & G STREPTOCOCCI AND THE TYPE-SPECIFIC POLYSACCHARIDES OF SEROTYPES C, E, AND F STREPTOCOCCUS MUTANS (PCM-8208343); 12 MONTHS \$46,000

UNIVERSITY OF SOUTH ALABAMA

LEINBACH, SUSAN S; NUCLEOPROTEIN COMPLEXES IN HERPES-VIRUS INFECTED CELLS (PCM-8110367 A01); 12 MONTHS \$51,825

ARIZONA

AMERIND AGROTECH LABORATORY

GENTRY, HOWARD S; GUM TRAGACANTH PLANT SELECTION AND SEED INCREASE (PCM-8204335 *); 36 MONTHS \$66,172

ARIZONA STATE UNIVERSITY

REEVES, HENRY C; MODULATION OF NADP-ISOCITRATE DEHYDROGENASE (PCM-7921714 A02); 12 MONTHS \$71,035

REEVES, HENRY C; MODULATION OF NADP-ISOCITRATE DEHYDROGENASE (PCM-7921714 A03); \$26,924

HAZEL, JEFFREY R; THERMAL ADAPTATION IN BIOLOGICAL MEMBRANES OF POIKILOTHERMS (PCM-8003454 A02); 12 MONTHS \$42,408

DAVIDSON, ELIZABETH W; INSECTICIDAL TOXIN OF BACILLUS SPHERICUS STRAIN 1593 (PCM-8004262 A02); 12 MONTHS \$42,950

HADLEY, NEIL F; CUTICULAR LIPIDS AND THEIR ROLE IN CONTROLLING TRANSPIRATION IN TERRESTRIAL ARTHROPODS (PCM-8021566 A01); 12 MONTHS \$45,800

CHANDLER, DOUGLAS E; THE ROLE OF CALCIUM IN LYSSOMAL ENZYME SECRETION BY NEUTROPHILS (PCM-8109788 A01); 12 MONTHS \$60,000

CHANDLER, DOUGLAS E; ACQUISITION OF A FREEZE FRACTURE UNIT (PCM-8115582); 12 MONTHS \$38,000

TOWILL, LESLIE R; SUCROSE COMPARTMENTATION AND UTILIZATION IN UNIRRADIATED AND IRRADIATED ONOCLEA SPORES (PCM-8120250); 24 MONTHS \$78,000

TRELEASE, RICHARD N; OILSEED METABOLISM - COMPARTMENTATION AND DEVELOPMENTAL CONTROL OF GLYOXYSSOMAL ENZYMES (PCM-8204666); 24 MONTHS \$100,051

RIGHETTI, TIMOTHY L; BACKHAUS, RALPH A, AND PINKAVA, DONALD J; THE FEASIBILITY OF HOST RANGE EXPANSION IN NITROGEN FIXING ACTINORRHIZAL SYSTEMS (PCM-8204885); 24 MONTHS \$63,486

CHURCH, KATHLEEN K, AND LIN, H P; CHROMOSOME DISTRIBUTION DURING MITOSIS AND MEIOSIS IN DROSOPHILA MELANOGASTER MALES (PCM-8207538); 12 MONTHS \$49,548

UNIVERSITY OF ARIZONA-COLLEGE OF MEDICINE

WELLS, MICHAEL A; MECHANISM OF ACTION OF PHOSPHOLIPASES (PCM-8022654 A01); 12 MONTHS \$37,000

DANTZLER, WILLIAM H; RENAL FUNCTION IN VERTEBRATES (PCM-8202360); 12 MONTHS \$61,002

UNIVERSITY OF ARIZONA

WILSON, GEORGE S; ELECTROCHEMICAL STUDIES OF BIOLOGICAL REDOX REACTIONS (PCM-8011555 A02); 12 MONTHS \$40,000

HEWLETT, MARTINEZ J; BIOCHEMISTRY OF UUKUNIEMI VIRUS RNA (PCM-8011785 A02); 12 MONTHS \$38,000

MENDELSON, NEIL H; CONTROL OF GROWTH AND DIVISION: THE HELIX SYSTEM (PCM-8104194); 12 MONTHS \$76,006

HUBBY, VICTOR J; STRUCTURAL STUDIES OF SYNTHETIC HORMONES AND POLYPEPTIDES (PCM-8112900 A01); 12 MONTHS \$37,800

GOLL, DARRYL E; ROLE OF A CA²⁺-ACTIVATED PROTEASE IN CONTRACTILE PR. TEIN TURNOVER (PCM-8118177); 12 MONTHS \$40,000

MOUNT, DAVID W; GENETIC STUDIES OF ESCHERICHIA COLI K-12 (PCM-8208440); 12 MONTHS \$50,000

ARKANSAS

UNIVERSITY OF ARKANSAS MED SCIENCES CAMPUS

TANK, PATRICK W; PATTERN REGULATION IN REGENERATING AND DEVELOPING FORELIMBS OF SALAMANDERS (PCM-7920503 A02); 12 MONTHS \$32,680

CALIFORNIA

AGOURON INSTITUTE

HAGLER, ARNOLD T; STRUCTURE, ENERGETICS, AND DYNAMICS OF ORGANIC MOLECULES: PEPTIDES (PCM-8204908 *); 12 MONTHS \$35,000

AMERICAN SOCIETY OF ZOOLOGISTS

CLARK, NANCY B, AND NORRIS, DAVID O; SYMPOSIUM ON ENDOCRINE EVOLUTION IN LOWER VERTEBRATES; LOUISVILLE, KENTUCKY, DECEMBER 27-30, 1982 (PCM-8203730); 6 MONTHS \$4,000

CALIFORNIA DEPARTMENT OF HEALTH SERVICES

DUNNEBACKE, THELMA H; STUDIES ON THE CYTOPATHOGEN FROM AMEBAE OF THE GENUS NAEGLERIA (PCM-8103261 A01); 12 MONTHS \$75,000

CALIFORNIA INSTITUTE OF TECHNOLOGY

BENZER, SEYMOUR; GENETIC ANALYSIS OF NERVOUS SYSTEM AND BEHAVIOR (PCM-7911771 A02); 12 MONTHS \$248,965

LAZARIDES, ELIAS; THE BIOSYNTHESIS AND METABOLISM OF DESMIN AND INTERMEDIATE FILAMENTS (PCM-7914195 A02); 12 MONTHS \$51,210

BERG, HOWARD C; BACTERIAL FLAGELLAR ROTATION (PCM-7922601 A02); 12 MONTHS \$40,000

DAVIDSON, ERIC H, AND BRITTEN, ROY J; REPETITIVE SEQUENCE EXPRESSION AND GENOMIC EVOLUTION (PCM-8004072 A02); 12 MONTHS \$50,000

DREYER, WILLIAM J; PROTEIN CHEMICAL STUDIES OF GP70 DIVERSITY (PCM-8005599 A02); 12 MONTHS \$50,000

STRAUSS, JAMES H; STRUCTURE AND REPLICATION OF SINDRIS VIRUS (PCM-8022830 A01); 12 MONTHS \$40,000

HOPFIELD, JOHN J; THEORETICAL AND EXPERIMENTAL STUDIES OF BIOLOGICAL MOLECULES AND PROCESSES (DMR-8107494 A01 *); 12 MONTHS \$30,900

REVEL, JEAN P; ACQUISITION OF A HIGH RESOLUTION MICROSCOPE (PCM-8115775); 12 MONTHS \$100,000

HOOD, LEROY E; ACQUISITION OF CELL SORTER (PCM-8115944); 12 MONTHS \$135,000

LOWENSTAM, HEINZ A, AND KIRSCHVINK, JOSEPH L; ACQUISITION OF A ROCK MAGNETOMETER FOR BIOLOGICAL RESEARCH (PCM-8203627); 12 MONTHS \$90,000

CALIFORNIA PUBLIC HEALTH FOUNDATION

PEREIRA, LENORE P; ANTIGENIC AND FUNCTIONAL DOMAINS OF HSV GLYCOPROTEINS (PCM-8209749); 12 MONTHS \$55,000

CALIFORNIA STATE COLLEGE, BAKERSFIELD

BLUME, F DUANE; METABOLIC AND ENDOCRINE FUNCTION AT EXTREME ALTITUDES (PCM-8102881 A01); \$3,000

CALIFORNIA STATE UNIVERSITY, FULLERTON

NAGEL, GLENN M; THE FUNCTION OF DISSIMILAR SUBUNITS IN GLYCYL TRNA SYNTHETASE (PCM-7714026 A02); 6 MONTHS \$8,000

CALIFORNIA STATE UNIVERSITY, LOS ANGELES

ANDREOLI, ANTHONY J; CONTROL OF MEMBRANE DEVELOPMENT (PCM-8121575 *); 24 MONTHS \$40,000

CALIFORNIA STATE UNIVERSITY, NORTHRIDGE

POLLOCK, EDWARD; ACQUISITION OF AN ELECTRON MICROSCOPE (PCM-8200173); 12 MONTHS \$60,000

CITY OF HOPE RESEARCH INSTITUTE

ROSSI, JOHN J; SYNTHETIC DNA IN PROKARYOTIC REGULATORY SEQUENCE STUDIES (PCM-8108280 A01); 12 MONTHS \$45,000

HELICON FOUNDATION

THOMAS, CHARLES A; FUNCTIONAL DETERMINATION OF CHROMATIN (PCM-8116591 A01); 12 MONTHS \$50,000

LA JOLLA CANCER RESEARCH FOUNDATION

FUJIMURA, FRANK K; VIRUSES AND TERATOCARCINOMA CELL DIFFERENTIATION (PCM-8103300 A01); 12 MONTHS \$55,191

POMONA COLLEGE

PANASENKO, SHARON M.; DEVELOPMENTAL AND CHEMOTACTIC SIGNAL PROCESSING (PCM-8114213); 24 MONTHS \$70,000

SALK INSTITUTE FOR BIOLOGICAL STUDIES

PFÄHL, MAGNUS; GENETIC APPROACH TO STEROID HORMONE ACTION (PCM-8104184 A01); 12 MONTHS \$75,000

HUNT, RICHARD K.; DEVELOPMENT OF NERVE-CELL SPECIFICITY: CLONAL AND RETINOTECTAL PATTERNS (PCM-8244490); 12 MONTHS \$22,000

STANFORD UNIVERSITY-SCHOOL OF MEDICINE

KORNBERG, ARTHUR; MEMBRANES IN DNA REPLICATIONS AND THE VIRAL LIFE CYCLE (PCM-7725985 A04); 12 MONTHS \$65,000

HOGNESS, DAVID S.; THE STRUCTURE AND FUNCTION OF ANIMAL CHROMOSOMES (PCM-7622421 A03); 12 MONTHS \$88,921

CIARANIELLO, ROLAND D.; S-ADENOSYLMETHIONINE IN NEURO-TRANSMITTER FUNCTION (PCM-8011525 A01); 12 MONTHS \$55,000

BALDWIN, ROBERT L.; TERTIARY STRUCTURE OF DNA IN PHAGE LAMBDA (PCM-8022706 A01); 12 MONTHS \$31,500

KORN, LAURENCE; CONTROL OF TRANSCRIPTION OF THE XENOPUS 5S RNA GENES (PCM-8104522 A01); 12 MONTHS \$55,000

STOCKDALE, FRANK E.; THE MYOGENIC CELL SURFACE (PCM-8202893); 24 MONTHS \$134,000

STANFORD UNIVERSITY

YANOFSKY, CHARLES; GENETICS AND BIOCHEMISTRY OF THE TRYPTOPHAN OPERON (PCM-7724333 A04); 12 MONTHS \$111,100

LEHMAN, I. ROBERT; MECHANISMS OF GENETIC RECOMBINATION (PCM-7904638 A03); 12 MONTHS \$75,000

BOXER, STEVEN G.; PHOTOCHEMICAL MECHANISM AND MACROMOLECULAR ORGANIZATION IN PHOTOSYNTHETIC MODELS AND REACTION CENTERS (PCM-7926677 A02); 12 MONTHS \$45,000

KAISER, ARMIN D.; CELL-CELL INTERACTIONS AND MOTILITY IN MYXOCOCCUS (PCM-8010635 A01); 12 MONTHS \$65,287

ZEIGER, EDUARDO; LIGHT, STOMATAL FUNCTION, AND ENERGY TRANSDUCTION IN THE GUARD CELLS (PCM-8012060 A01); 12 MONTHS \$45,671

FALKOW, STANLEY; EVOLUTION OF BACTERIAL PLASMIDS (PCM-8015722 A01); 12 MONTHS \$84,755

FEIGENBAUM, EDWARD A.; BUCHANAN, BRUCE G.; KEDES, LAWRENCE H. AND BRUTLAG, DOUGLAS L.; MOLGEN: A COMPUTER SCIENCE APPLICATION TO MOLECULAR BIOLOGY (ECS-8016247 A02*); 12 MONTHS \$44,273

PARHAM, PETER; MOLECULAR BASIS OF POLYMORPHIC HLA ANTIGENIC DETERMINANTS (PCM-8017834 A01); 12 MONTHS \$60,000

WALLACE, DOUGLAS C.; CYTOPLASMIC GENETICS IN CULTURED MAMMALIAN CELLS (PCM-8021871 A01); 12 MONTHS \$47,582

JARDETSKY, OLEG; NUCLEAR MAGNETIC RESONANCE INVESTIGATIONS OF MACROMOLECULAR DYNAMICS (PCM-8021899 A01); 12 MONTHS \$58,500

MCCONNELL, HARDEN M.; PROBLEMS IN MEMBRANE BIOPHYSICS (PCM-8021993 A01); 12 MONTHS \$72,000

GREEN, PAUL B.; BIOPHYSICS OF ORGANOGENESIS IN PLANTS (PCM-8102330 A01); 12 MONTHS \$63,036

MAZIA, DANIEL; THE ESTABLISHMENT OF THE MITOTIC APPARATUS (PCM-8104467 A01); 12 MONTHS \$44,610

EPEL, DAVID; BIOCHEMISTRY OF FERTILIZATION AND EARLY DEVELOPMENT (PCM-8105123 A01); 12 MONTHS \$130,000

LEDERBERG, ESTHER M.; MAINTENANCE OF THE PLASMID REFERENCE CENTER (PCM-8105434 A01); \$32,791

LEDERBERG, ESTHER M.; MAINTENANCE OF THE PLASMID REFERENCE CENTER (PCM-8105434 A02*); 12 MONTHS \$35,000

PITTENDRIGH, COLIN S.; PHYSIOLOGICAL AND GENETIC ANALYSIS OF THE CIRCADIAN COMPONENT IN THE PHOTOPERIODISM OF DROSOPHILA AURARIA (PCM-8113041 A01); 12 MONTHS \$65,558

SOLOMON, EDWARD I.; SPECTROSCOPIC AND MAGNETIC STUDIES OF METALLOPROTEIN ACTIVE SITES (PCM-8119844); 12 MONTHS \$50,000

PECORA, ROBERT; THEORETICAL AND EXPERIMENTAL STUDIES OF THERMAL MOTIONS IN LIQUIDS AND POLYMER SYSTEMS (CHEMISTRY) (CHE-8200512*); 12 MONTHS \$30,000

SOLOMON, EDWARD I.; SPECTROSCOPIC STUDIES OF ELECTRONIC STRUCTURE ANALOGUES OF METALLOPROTEIN ACTIVE SITES (CHE-8204841*); 12 MONTHS \$15,000

JARDETSKY, OLEG; ANAEROBIC METABOLISM IN HIGHER PLANTS, ITS CONTROL AND RELEVANCE TO FLOODING TOLERANCE (PCM-8204877); 12 MONTHS \$53,191

HODGSON, KEITH, AND DONIACH, SEBASTIAN; APPLICATION OF X-RAY ABSORPTION SPECTROSCOPY TO THE STUDY OF MOLECULES OF BIOLOGICAL INTEREST (PCM-8208115); 12 MONTHS \$73,000

BALDWIN, ROBERT L.; THE RECOGNITION COMPLEX FORMED BY S-PEPTIDE AND S-PROTEIN DURING FOLDING (PCM-8209296); 12 MONTHS \$70,000

KORNBERG, ARTHUR; STRUCTURE AND FUNCTIONS OF DNA POLYMERASE III HOLOENZYME OF E. COLI (PCM-8209380); 12 MONTHS \$82,000

PITTENDRIGH, COLIN S.; REPLACEMENT OF HOPKINS MARINE STATION SEA WATER SYSTEM (DEB-8209660*); 12 MONTHS \$35,000

JARDETSKY, OLEG; THE TENTH INTERNATIONAL CONFERENCE ON MAGNETIC RESONANCE IN BIOLOGICAL SYSTEMS, STANFORD UNIVERSITY, STANFORD, CALIFORNIA, AUGUST 29 THRU SEPTEMBER 3, 1982 (PCM-8210178); 12 MONTHS \$5,500

UNIVERSITY OF CALIFORNIA, BERKELEY

BUCHANAN, BOB B.; REGULATORY MECHANISMS IN CARBOHYDRATE SYNTHESIS (PCM-7815287 A03); 12 MONTHS \$76,348

BUCHANAN, BOB B.; REGULATORY MECHANISMS IN CARBOHYDRATE SYNTHESIS (PCM-7815287 A04); \$11,166

MORTIMER, ROBERT K.; GENETIC STUDIES OF SACCHAROMYCOPSIS LIPOLYTICA (PCM-7904660 A02); 12 MONTHS \$50,000

GLAZER, ALEXANDER N.; MOLECULAR ARCHITECTURE OF LIGHT-ENERGY TRANSDUCING SYSTEMS (PCM-7910996 A02); 12 MONTHS \$45,000

ZUSMAN, DAVID R.; REGULATION OF GENE EXPRESSION IN BACTERIA (PCM-7922249 A02); 12 MONTHS \$50,000

ARNON, DANIEL I.; ELECTRON TRANSPORT AND PHOSPHORYLATION IN ENERGY TRANSDUCING MEMBRANES (PCM-7925581 A03); 12 MONTHS \$93,800

WILLIAMS, ROBLEY C.; ELECTRON MICROSCOPY OF ENZYMES AND OTHER OLIGOMERIC STRUCTURES (PCM-8010650 A02); 12 MONTHS \$35,000

BURNSIDE, MARY B.; MOTILE MODELS OF TELEOST RETINAL CONES (PCM-8011792 A02); 12 MONTHS \$50,000

LAETSCH, W. M.; CELL WALL ANTIGEN CHANGES DURING THE DEVELOPMENT OF FUCUS EMBRYOS (PCM-8012021 A03); 12 MONTHS \$60,000

KLINMAN, JUDITH P.; STRUCTURE-FUNCTION STUDIES OF CU2 AMINE OXIDASES (PCM-8012022 A01); 12 MONTHS \$43,000

SCHKMAN, RANDY W.; MECHANISM AND CONTROL OF EUKARYOTIC CELL DIVISION (PCM-8019415 A01); 12 MONTHS \$64,426

KIM, SUNG-HOU; PHYSICAL STUDIES OF DNA-PROTEIN RECOGNITION (PCM-8019468 A01); 12 MONTHS \$45,000

DANIELL, ELLEN; ADENOVIRUS CHROMATIN: FUNCTION OF VIRALLY CODED BASIC PROTEINS (PCM-8020825 A01); 12 MONTHS \$52,336

SUNG, ZINMAY R.; DEVELOPMENTAL GENETICS OF CARROT EMBRYO GENESIS (PCM-8021209 A01); 12 MONTHS \$50,000

BECKENDORF, STEVEN K.; DEVELOPMENTAL GENE REGULATION: THE GLUE PROTEIN GENES (PCM-8021834 A01); 12 MONTHS \$40,000

SCHACHMAN, HOWARD K.; FUNCTIONAL ASPECTS OF THE QUANTERNARY STRUCTURE OF PROTEINS. EFFECT OF MUTATIONAL ALTERATIONS ON THE DYNAMICS OF THE REGULATORY ENZYME-ASPARTATE TRANSACETAMYLASE (PCM-8023012 A01); 12 MONTHS \$70,000

SCHACHMAN, HOWARD K.; FUNCTIONAL ASPECTS OF THE QUANTERNARY STRUCTURE OF PROTEINS. EFFECT OF MUTATIONAL ALTERATIONS ON THE DYNAMICS OF THE REGULATORY ENZYME-ASPARTATE TRANSACETAMYLASE (PCM-8023012 A02); 12 MONTHS \$70,000

BALLOU, CLINTON E.; METABOLISM AND FUNCTION OF YEAST CELL WALL GLYCOPROTEINS (PCM-8023388 A01); 12 MONTHS \$72,000

MALKIN, RICHARD; SPECTROSCOPIC STUDIES OF PRIMARY PHOTOCHEMICAL PROCESSES IN PHOTOSYNTHESIS (PCM-8103318 A01); 12 MONTHS \$42,300

STEINHARDT, RICHARD A.; IONIC REGULATION IN EARLY DEVELOPMENT (PCM-8104294 A01); 12 MONTHS \$60,000

LICHT, PAUL, AND PAPKOFF, HAROLD; COMPARATIVE PHYSIOLOGY AND BIOCHEMISTRY OF VERTEBRATE PITUITARY HORMONES (PCM-8109846 A01); 12 MONTHS \$189,000

FRAENKEL-CONRAT, HEINZ L.; PURIFICATION AND CHARACTERIZATION OF RNA-DEPENDENT RNA POLYMERASES OF PLANTS (PCM-8109869); 12 MONTHS \$42,000

BERN, HOWARD A.; PROPERTIES OF NEUROSECRETORY CELLS AND CERTAIN NEUROSECRETORY SYSTEMS (PCM-8110111 A01); 12 MONTHS \$124,905

CALENDAR, RICHARD L.; A NEW GENE AFFECTING TRANSCRIPTION IN ESCHERICHIA COLI (PCM-8110826 A01); 12 MONTHS \$42,597

KELLER, RAYMOND E.; A CELLULAR ANALYSIS OF AMPHIBIAN GAS-TRILATION (PCM-8110985 A01); 12 MONTHS \$45,000

TINOCO, IGNACIO; DEVELOPMENT OF AN APPARATUS TO MEASURE CIRCULAR INTENSITY DIFFERENTIAL SCATTERING (PCM-8115928); 12 MONTHS \$60,000

MATHIES, RICHARD A.; VISIBLE AND ULTRAVIOLET RAMAN STUDIES OF EXCITED STATES IN PROTEINS (CHE-8116042 A01); 12 MONTHS \$20,000

JONES, RUSSELL L.; THE CONTROL OF PLANT CELL ELONGATION BY HORMONES AND LIGHT (PCM-8116874); 12 MONTHS \$57,984

NEILANDS, JOHN B.; IRON ASSIMILATION SYSTEMS IN MICROBIAL PLANT PATHOGENS (PCM-8116882); 24 MONTHS \$69,277

FOGEL, SEYMOUR; GROUP TRAVEL FOR U.S. PARTICIPANTS IN THE ELEVENTH INTERNATIONAL CONFERENCE ON YEAST GENETICS AND MOLECULAR BIOLOGY, MONTPELLIER, FRANCE - SEPTEMBER 12-20, 1982 (PCM-8118053); 6 MONTHS \$4,000

OTSUKA, ANTHONY; THE BIOTIN OPERON: REGULATION, STRUCTURE AND FUNCTION (PCM-8118360); 24 MONTHS \$100,000

JENSEN, WILLIAM A.; STUDIES ON ZYGOTE ACTIVATION IN ANGIOSPERMS (PCM-8120738); 24 MONTHS \$70,000

TANADA, YOSHINOBU; RESISTANCE OF INSECTS TO INFECTIOUS DISEASES: BACULOVIRUS INFECTIONS-SYNERGISTIC INTERACTIONS AND HYBRIDIZATION (PCM-8201247); 12 MONTHS \$60,000

NICOLL, CHARLES S.; EVOLUTIONARY BIOLOGY OF PROLACTINS AND SOMATOTROPINS (PCM-8203583); 12 MONTHS \$70,000

FREELING, MICHAEL; CONFERENCE ON REGULATORY GENES IN HIGHER ORGANISMS; JULY 18-21, 1982, SALT LAKE CITY, UTAH (PCM-8205474*); 12 MONTHS \$8,500

KIRSCH, JACK P.; STUDIES IN THE MECHANISMS OF ENZYME CATALYSIS (PCM-8205590); 12 MONTHS \$61,000

UNIVERSITY OF CALIFORNIA, DAVIS-SCHOOL OF MEDICINE

HERSHEY, JOHN W.; REGULATION OF TRANSLATION DURING EARLY DEVELOPMENT (PCM-8205833 A01); 12 MONTHS \$50,000

UNIVERSITY OF CALIFORNIA, DAVIS

EPSTEIN, EMANUEL; COMPARATIVE PHYSIOLOGY OF SALT RELATIONS OF PLANTS (PCM-7911747 A02); 12 MONTHS \$52,519

- DOI, ROY H. CONTROL MECHANISMS IN BACTERIAL DIFFERENTIATION (PCM-7924872 A02); 12 MONTHS \$46,000
- ERICKSON, CAROL A. ROLE OF MATRIX AND CELL SURFACE IN NEURAL CREST CELL MORPHOGENESIS (PCM-8004524 A02); 12 MONTHS \$40,071
- CROWE, JOHN H. ANHYDROBIOSIS IN LOWER ANIMALS (PCM-8004720 A02); 12 MONTHS \$56,289
- OGRYDZIAK, DAVID M. EXOZYME SECRETION IN SACCHAROMYCES LIPOLYTICA (PCM-8011510 A01); 12 MONTHS \$50,000
- HUNGATE, R. E. AND LABAVITCH, JOHN M. BIOCHEMISTRY AND GENETICS OF CONVERSION OF THE PLANT POLYSACCHARIDES BY ANAEROBIC BACTERIA (PCM-8011571 A02); 12 MONTHS \$106,613
- GILCHRIST, DAVID G. BOTTINI, ALBERT T. AND PRATT, DAVID. MOLECULAR ASPECTS OF DISEASE STRESS IN HIGHER PLANTS (PCM-8011791 A02); 12 MONTHS \$50,000
- KOSUGE, TSUNE. SYNTHESIS OF INDOLEACETIC ACID IN PSEUDOMONAS SAVASTANOL (PCM-8011794); 24 MONTHS \$75,000
- ARMSTRONG, PETER B. MODULATION OF CELLULAR ADHESIVE AFFINITIES BY COMPONENTS OF THE EXTRACELLULAR MATRIX (PCM-8024181 A01); 12 MONTHS \$32,904
- SILK, WENDY K. ON SPATIAL VARIATION OF PLANT GROWTH PARAMETERS (PCM-8100296 A01); 12 MONTHS \$50,000
- BENJAMINI, ELIEZER. DETERMINANT-SPECIFIC REGULATION OF B CELL ACTIVATION (PCM-8103263 A01); 12 MONTHS \$62,026
- CONN, ERIC E. PHYSIOLOGICAL STUDIES ON CYANOGENESIS IN PLANTS (PCM-8104497); 12 MONTHS \$29,858
- LAGARIAS, J. C. STRUCTURE-FUNCTION STUDIES ON PHYTOCHROME (PCM-8108030 A01); 12 MONTHS \$40,320
- CASTELFRANCO, PAUL A. CHLOROPHYLL BIOSYNTHESIS (PCM-8108538); 12 MONTHS \$44,092
- LA MAR, GERT N. PARAMAGNETIC-INDUCED NUCLEAR RELAXATION AS A STRUCTURAL PROBE IN SOLUTION (CHEMISTRY) (CHE-8108766 A01); 12 MONTHS \$50,000
- HORWITZ, BARBARA A. MEMBRANE EVENTS ASSOCIATED WITH REGULATORY NONSHIVERING THERMOGENESIS (PCM-8109875 A01); 12 MONTHS \$55,000
- FALK, RICHARD H. AND LAUCHLI, ANDRE. ACQUISITION OF SCANNING ELECTRON MICROSCOPE (PCM-8113554); 12 MONTHS \$60,000
- YANG, S. F. MECHANISM AND REGULATION OF ETHYLENE BIOSYNTHESIS (PCM-8114933); 12 MONTHS \$76,987
- RAPPAPORT, LAWRENCE. SUBCELLULAR HORMONAL REGULATION: ACTIVE ROLE OF PROTOPLASTS AND VACUOLES IN UPTAKE, EFFLUX AND METABOLISM OF GIBBERELLIN A1 (PCM-8114942); 18 MONTHS \$72,000
- LUCAS, WILLIAM J. MECHANISMS AND REGULATION OF PLANT PLASMA MEMBRANE TRANSPORT SYSTEMS (PCM-8117721); 12 MONTHS \$60,000
- NUCCITELLI, RICHARD L. ION CURRENTS IN FERTILIZATION AND EARLY DEVELOPMENT (PCM-8118174); 12 MONTHS \$60,000
- SEGEL, IRWIN H. TRANSPORT AND METABOLISM OF SULPHUR AND NITROGEN COMPOUNDS (PCM-8119283); 24 MONTHS \$100,000
- SHEPHERD, ROBERT J. BIOLOGY OF DNA PLANT VIRUSES (PCM-8202462); 12 MONTHS \$65,000
- WARD, PETER D. AND GREENWALD, LEWIS I. BUOYANCY REGULATION IN THE CHAMBERED NAUTILUS (PCM-8202891); 24 MONTHS \$95,084
- INGRAHAM, JOHN L. DENITRIFICATION: GENETICS AND PHYSIOLOGY (PCM-8203548); 24 MONTHS \$95,000
- NUCCITELLI, RICHARD L. WEST COAST REGIONAL DEVELOPMENTAL BIOLOGY CONFERENCE, MAY 69, 1982, STANFORD SIERRA LODGE, FALLEN LEAF LAKE, CALIFORNIA (PCM-8204037); 12 MONTHS \$2,000
- PREISS, JACK. STUDIES OF STARCH METABOLISM IN LEAF TISSUE AND MAIZE ENDOSPERM (PCM-8205705); 12 MONTHS \$70,000
- KOSUGE, TSUNE. CONFERENCE ON GENETIC ENGINEERING OF PLANTS, AUGUST 15-19, 1982, DAVIS, CALIFORNIA (PCM-8207559); 12 MONTHS \$2,000
- UNIVERSITY OF CALIFORNIA, IRVINE-CALIFORNIA COLLEGE OF MEDICINE
- WASMUTH, JOHN J. GENETIC AND BIOCHEMICAL ANALYSIS OF MAMMALIAN CELL PROTEIN SYNTHESIS (PCM-8103600 A01); 12 MONTHS \$80,000
- UNIVERSITY OF CALIFORNIA, IRVINE
- BRANT, DAVID A. CONFORMATIONAL ANALYSIS OF POLYSACCHARIDES (PCM-7923041 A02); 12 MONTHS \$33,750
- WHITE, STEPHEN H. DYNAMICS OF BILAYER SOLUTIONS (PCM-8104518 A01); 12 MONTHS \$54,000
- CAMPBELL, RICHARD D. MORPHOGENESIS OF HYDRA: ROLE OF MUSCLE PROCESSES (PCM-8118507); 24 MONTHS \$75,000
- MCCARTHY, BRIAN J. MULTIGENE FAMILIES IN DROSOPHILA (PCM-8140415); 12 MONTHS \$64,694
- JOSEPHSON, ROBERT K. DEVELOPMENTAL CONTROL OF MUSCLE CONTRACTILE PROPERTIES IN INSECTS (PCM-8201559); 24 MONTHS \$119,999
- POSKET, DONALD E. STUDIES ON THE MOLECULAR BASIS OF CHROMOPLAST DIFFERENTIATION (PCM-8203013); 24 MONTHS \$90,000
- STEPHENS, GROVER C. AMINO ACID TRANSPORT IN LARVAL AND ADULT MARINE INVERTEBRATES (PCM-8208185); 12 MONTHS \$55,000
- RODRIGUEZ, ELOY. RENEWABLE PHYTOCHEMICAL SPECIALTIES FROM DESERT PLANTS OF BAJA, CALIFORNIA (PCM-8209100); 24 MONTHS \$95,002
- UNIVERSITY OF CALIFORNIA, LOS ANGELES-SCHOOL OF MEDICINE
- WALL, RANDOLPH. RNA PROCESSING IN IMMUNOGLOBULIN HEAVY CHAIN GENE SWITCHING AND DELETION VARIANTS (PCM-7924876 A02); 12 MONTHS \$64,797
- EISENMAN, GEORGE. AND HORN, RICHARD. MOLECULAR BASIS OF ION SELECTIVITY IN PERMEATION AND GATING FOR NATURAL AND ARTIFICIAL IONIC CHANNELS IN CELL MEMBRANES AND BILAYERS (PCM-8109702 A01); 12 MONTHS \$67,500
- NAYAK, DEBI P. GENETICS OF DEFECTIVE INTERFERING INFLUENZA VIRUSES (PCM-8118292); 12 MONTHS \$58,000
- UNIVERSITY OF CALIFORNIA, LOS ANGELES
- LASCELLES, JUNE. REGULATION OF TETRAPYRROLE SYNTHESIS AND ASSOCIATED COMPLEXES (PCM-7684301 A04); 12 MONTHS \$37,600
- CHAPMAN, DAVID J. STEROL BIOSYNTHESIS IN PROKARYOTES (PCM-7825852 A02); 12 MONTHS \$47,830
- MUSCATINE, LEONARD. CELLULAR MECHANISMS GOVERNING ENDOCYTOSIS OF SYMBIOTIC ALGAE BY METAZOAN CELLS (PCM-7827380 A01); 6 MONTHS \$2,764
- SALSER, WINSTON A. ANALYSIS OF HUMAN HIGHLY REPETITIVE DNA (PCM-7905627 A02); 12 MONTHS \$30,000
- MARTINSON, HAROLD G. CHROMATIN STRUCTURE (PCM-7910654 A03); 12 MONTHS \$120,000
- COLLIER, ROBERT J. ISOLATION AND NUCLEOTIDE SEQUENCING OF THE STRUCTURAL GENE FOR DIPHTHERIA TOXIN (PCM-7910684 A02); 12 MONTHS \$55,000
- TOBIN, ALLAN J. AND MARTINSON, HAROLD G. GLOBIN GENE EXPRESSION IN ERYTHROID DEVELOPMENT (PCM-7921646 A02); 12 MONTHS \$75,000
- WEST, CHARLES A. REGULATION OF ISOPRENOID BIOSYNTHESIS IN HIGHER PLANTS (PCM-7923142 A02); \$8,000
- WEST, CHARLES A. REGULATION OF ISOPRENOID BIOSYNTHESIS IN HIGHER PLANTS (PCM-7923142 A03); 12 MONTHS \$57,930
- WALKER, DAN B. DEDIFFERENTIATION AND DETERMINATION IN PLANT EPIDERMIS (PCM-7923490 A01); 24 MONTHS \$85,000
- RITTENBERG, SYDNEY C. THE PHYSIOLOGY AND BIOCHEMISTRY OF THE INTRAPERIPLASMIC GROWTH OF BDELLOVIBRIO BACTERIVORUS (PCM-8013467 A01); 12 MONTHS \$91,000
- GLITZ, DOHN G. ANTI-HAPTEN ANTIBODIES AS PROBES OF RIBOSOME STRUCTURE (PCM-8016598 A02); 12 MONTHS \$50,000
- EISERLING, FREDERICK A. STRUCTURE AND ASSEMBLY OF LIGHT ENERGY TRANSDUCERS IN CYANOBACTERIA (PCM-8021363 A01); 12 MONTHS \$40,500
- SCHUMAKER, VERNE N. MOLECULAR FLEXIBILITY AND THE ACTIVATION OF COMPLEMENT (PCM-8021368 A01); 12 MONTHS \$35,550
- PHINNEY, BERNARD O. PHYSIOLOGY AND BIOCHEMISTRY OF GIBBERELLINS (PCM-8021588 A01); 12 MONTHS \$72,000
- SZEGO, CLARA M. LYSOSOMAL FUNCTION IN NUCLEOCYTOPLASMIC COMMUNICATION (PCM-8021829 A01); 12 MONTHS \$60,000
- LENGYEL, JUDITH A. ANALYSIS OF BLASTODERM-SPECIFIC GENES IN DROSOPHILA (PCM-8021830 A01); 12 MONTHS \$51,200
- LAKE, JAMES A. RIBOSOME FUNCTION AND THREE DIMENSIONAL STRUCTURE (PCM-8023016 A01); 12 MONTHS \$58,500
- TOOHEY, J. I. METHYLTHIO GROUPS AND CELL DIVISION (PCM-8025460); 12 MONTHS \$50,000
- BOYER, PAUL D. ENERGY-TRANSDUCING MECHANISMS IN CONTRACTION AND ACTIVE TRANSPORT (PCM-8100817 A01); 12 MONTHS \$60,000
- O'CONNOR, JOHN D. EFFECTS OF MORPHOGENETIC HORMONES ON CULTURED CELLS (PCM-8109639 A01); 12 MONTHS \$60,000
- THORNER, J. PHILIP. THE MOLECULAR ORGANIZATION OF PHOTOSYNTHETIC PIGMENTS IN PLANTS AND BACTERIA (PCM-8112759); 12 MONTHS \$45,000
- EISENBERG, DAVID S. ACQUISITION OF *U³²C¹⁴ AREA X-RAY DIFFRACTOMETER (PCM-8115773); 24 MONTHS \$120,000
- ZABIN, IRVING. CORRELATION OF PROTEIN AND DNA SEQUENCES IN THE MALTOSE OPERON (PCM-8118112); 12 MONTHS \$35,000
- GRALLA, JAY D. RNA METABOLISM IN TUMOUR VIRUS SV40-INFECTED CELLS (PCM-8118712); 12 MONTHS \$35,000
- GOLDBERG, ROBERT B. GENOME ORGANIZATION AND EXPRESSION IN HIGHER PLANTS (PCM-8120239); 12 MONTHS \$86,000
- CAMPBELL, JOHN H. FORMATION OF PATTERNS ON MOLLUSC SHELLS (PCM-8120923); 24 MONTHS \$50,000
- DICKERSON, RICHARD E. STRUCTURE AND INTERACTION OF DNA, DRUGS AND PROTEINS (PCM-8202775); 12 MONTHS \$105,000
- SALSER, WINSTON A. RECOMBINANT DNA ANALYSIS OF HUMAN MACROPHAGE DIFFERENTIATION IN VITRO (PCM-8204182); 12 MONTHS \$65,000
- WEISS, RICHARD L. AMINO ACID COMPARTMENTATION IN NEUROSPORA (PCM-8204194); 12 MONTHS \$57,620
- GONZALEZ, ELMA. TARGETING AND DEPLOYMENT OF ENZYMES DURING ORGANELLE DEVELOPMENT IN CASTOR BEAN ENDOSPERM (PCM-8204539); 12 MONTHS \$65,000
- COOPER, EDWIN L. AND STEIN, ELIZABETH. ORIGIN OF IMMUNE RECEPTORS (PCM-8204879); 12 MONTHS \$60,000
- EISENBERG, DAVID S. AMPHIPHILIC AND MEMBRANE-RELATED PROTEINS (PCM-8207520); 12 MONTHS \$48,000
- KASAMATSU, HARUMI. BIOSYNTHESIS AND TRANSPORT TO THE NUCLEUS OF SV40 STRUCTURAL POLYPEPTIDES (PCM-8208041); 12 MONTHS \$50,000
- UNIVERSITY OF CALIFORNIA, RIVERSIDE
- WEDDING, RANDOLPH T. MALATE AS A CENTRAL POINT OF CONTROL FOR PLANT METABOLISM (PCM-7910449 A02); 12 MONTHS \$45,940
- DAWSON, WILLIAM O. GENE EXPRESSION OF CDNA CLONES OF COWPEA CHLOROTIC MOTTLE VIRUS (PCM-7921664 A01); 24 MONTHS \$46,951

- TRAUGH, JOLINDA A. IMMUNO-BIOCHEMICAL STUDIES OF E. COLI REBC ENZYME (PCM-7922987 A02); 12 MONTHS \$38,000
- THOMSON, WILLIAM W. DEVELOPMENT, STRUCTURE, AND FUNCTION OF SALT GLANDS (PCM-8003779 A02); 12 MONTHS \$44,998
- DUNN, MICHAEL F. THE INVESTIGATION OF ENZYME CATALYSIS: MECHANISM AT THE LEVEL OF SUBUNIT FUNCTION AND THE CHEMICAL TRANSFORMATION (PCM-8108862 A01); 12 MONTHS \$34,000
- TING, IRWIN P. 5TH ANNUAL SYMPOSIUM IN BOTANY AND PLANT SCIENCES, JANUARY 14-15, 1982; RIVERSIDE, CALIFORNIA (PCM-8114946); 12 MONTHS \$3,000
- BAKER, MARY ANN. RESPONSES OF MAMMALS TO THE THERMAL ENVIRONMENT: HEAT, EXERCISE AND DEHYDRATION (PCM-8200351); 12 MONTHS \$50,000
- TING, IRWIN P. REGULATION OF PHOTOSYNTHESIS: CRASSULACEAN ACID METABOLISM (PCM-8200368); 24 MONTHS \$90,000
- SHANNON, LELAND M. BIOCHEMISTRY AND PHYSIOLOGY OF PLANT LECTINS (PCM-8205148); 12 MONTHS \$45,000
- KEEN, NOEL T. LIPOPOLYSACCHARIDES: THEIR ROLES IN DETERMINING THE RACE-SPECIFIC OF SOYBEAN RESISTANCE TO BACTERIA (PCM-8207636); 24 MONTHS \$90,000
- YERMANOS, DEMETRIOS M. DEVELOPMENT OF MALE STERILE INBRED LINES AND HYBRID CULTIVARS - INDEHISCENT SESAME (PCM-8208741); 12 MONTHS \$42,361
- UNIVERSITY OF CALIFORNIA, SAN DIEGO-SCHOOL OF MEDICINE
- ROSENFELD, MICHAEL G. HORMONAL REGULATION OF PANCREATIC PROTEIN SYNTHESIS (PCM-7911505 A02); 12 MONTHS \$75,000
- BRUNTON, LAURENCE L. COMPARTMENTATION OF CYCLIC AMP ACTION (PCM-8110116 A01); 12 MONTHS \$50,317
- UNIVERSITY OF CALIFORNIA, SAN DIEGO-SCHRIPPS INSTITUTION OF OCEANOGRAPHY
- LEWIN, RALPH A. ABCISSION OF CILIA OR FLAGELLA: ITS INDUCTION AND CONTROL (PCM-8002353 A01); 12 MONTHS \$47,273
- BENSON, ANDREW A. PHYSIOLOGY AND ECOLOGY OF HALOBACTERIA (PCM-8116330); 24 MONTHS \$86,482
- FAULKNER, D. JOHN. CHEMICAL ECOLOGY OF MARINE ORGANISMS (CHEMISTRY) (CHE-8121471*); 12 MONTHS \$17,700
- WHITE, FRED N. CARDIORESPIRATORY REGULATION IN VERTEBRATES (PCM-8204545); 12 MONTHS \$82,000
- UNIVERSITY OF CALIFORNIA, SAN DIEGO
- DELUCA, MARLENE. CONVERSION OF CHEMICAL ENERGY INTO LIGHT ENERGY BY BIOLOGICAL SYSTEMS (PCM-7826221 A02); 12 MONTHS \$62,459
- BUTLER, WARREN L. PHOTOCHEMICAL MECHANISMS OF PHOTOSYNTHESIS (PCM-7903987 A01); 3 MONTHS \$10,000
- SIMON, MELVIN I. BIOSYNTHESIS OF SUBCELLULAR STRUCTURES (PCM-7904403 A02); 12 MONTHS \$152,000
- KEARNS, DAVID R. STRUCTURAL AND DYNAMIC PROPERTIES OF NATURAL AND SYNTHETIC DNA'S (PCM-7911571 A02); 12 MONTHS \$54,000
- DENNIS, EDWARD A. PHOSPHOLIPASE A2 AND MIXED MICELLES OF PHOSPHOLIPID AND SURFACTANT (PCM-7922839 A02); 12 MONTHS \$32,400
- SOMERO, GEORGE N. PRESSURE, TEMPERATURE AND SOLUTE EFFECTS ON PROTEIN ASSEMBLY AND ENZYMIC CATALYSIS: A MECHANISTIC AND EVOLUTIONARY ANALYSIS (PCM-8001949 A02); 12 MONTHS \$42,000
- GOULD-SOMERO, MEREDITH. MECHANISM IN POLYSPERMY PREVENTION AND EGG ACTIVATION (PCM-8003759 A02); 12 MONTHS \$83,585
- SCHULTZ, SHELDON, AND FEHER, GEORGE. EXPERIMENTAL SOLID STATE RESEARCH (DMR-8007969 A01*); 10 MONTHS \$20,000
- HAYASHI, MASAKI. TEMPLATE ACTIVITIES OF INTRACELLULAR BACTERIOPHAGE DNA (PCM-8011741 A01); 12 MONTHS \$65,000
- HAYASHI, MASAKI. TEMPLATE ACTIVITIES OF INTRACELLULAR BACTERIOPHAGE DNA (PCM-8011741 A02); 12 MONTHS \$70,000
- HOWELL, STEPHEN H. MUTATIONAL ANALYSIS OF A POTENTIAL PLANT VEHICLE (PCM-8011779 A01); 12 MONTHS \$65,000
- GEIDUSCHEK, E. PETER. STUDIES ON TRANSCRIPTIONAL REGULATION (PCM-8021648 A01); 12 MONTHS \$69,000
- XUONG, NGUYEN-HU. LOW TEMPERATURE PROTEIN CRYSTALLOGRAPHY (PCM-8021653 A01); 12 MONTHS \$40,500
- SPECTOR, DEBORAH H. MOLECULAR BIOLOGY OF MURINE CYTOMEGALOVIRUS (PCM-8022061 A01); 12 MONTHS \$50,000
- GOODMAN, MURRAY. SYNTHESIS, CONFORMATIONAL ANALYSIS AND PROPERTIES OF SEQUENTIAL POLYDEPSIPEPTIDES (CHE-8023002 A01*); 12 MONTHS \$20,000
- STERN, HERBERT. REGULATORY MECHANISMS IN MEIOSIS (PCM-8104125 A01); 12 MONTHS \$100,000
- SIMON, MELVIN I. TOXIN RESISTANCE IN MAMMALIAN CELLS (PCM-8107191 A01); \$14,000
- SIMON, MELVIN I. TOXIN RESISTANCE IN MAMMALIAN CELLS (PCM-8107191 A02); 12 MONTHS \$40,000
- SCHIEFFLER, IMMO E. GENETICS AND BIOCHEMISTRY OF RESPIRATION-DEFICIENT CHINESE HAMSTER CELLS (PCM-8109693 A01); 12 MONTHS \$65,000
- HOWELL, STEPHEN H. CONTROL OF THE CELL CYCLE IN CHLAMYDOMONAS REINHARDI (PCM-8109805); 12 MONTHS \$50,000
- GOODMAN, MURRAY. PURCHASE OF A 1180E DATA ACQUISITION SYSTEM (PCM-8111780); 12 MONTHS \$69,360
- CHRISPEELS, MAARTEN J. THE ONTOGENY OF PROTEIN BODIES AND THE METABOLISM OF RESERVE PROTEIN IN LEGUME COTYLEDONS (PCM-8114943); 12 MONTHS \$58,000
- KYTE, JACK E. CHEMICAL APPROACHES TO A DETERMINATION OF THE MOLECULAR STRUCTURE OF (NA, K) ADENOSINE TRIPHOSPHATASE (PCM-8118108); 12 MONTHS \$35,000
- KYTE, JACK E. THE CYANOGEN BROMIDE FRAGMENTS OF (NA, K) ADENOSINE (PCM-8118108 A01); \$25,000
- DOOLITTLE, RUSSELL F. SEARCHING FOR GENE PRODUCTS FROM THE UNIDENTIFIED READING FRAMES OF HUMAN MITOCHONDRIAL DNA (PCM-8118172); 24 MONTHS \$78,000
- ALLISON, WILLIAM S. THE MOLECULAR MECHANISM OF PROTON CONDUCTION IN ATP SYNTHETASE (PCM-8119285); 12 MONTHS \$28,000
- LOOMIS, WILLIAM F. GENETIC REGULATION OF DEVELOPMENT IN DICTYOSTELIUM (PCM-8202754); 12 MONTHS \$66,000
- SATO, GORDON H. SYSTEMATIC PRIMARY CULTURE FOR CELL PHYSIOLOGY (PCM-8202797); 12 MONTHS \$40,441
- FEHER, GEORGE, AND OKAMURA, MELVIN Y. PRIMARY PROCESSES IN BACTERIAL PHOTOSYNTHESIS (PCM-8202811); 12 MONTHS \$100,000
- BAKER, BRUCE S. WOLFNER, MARIANA, AND BELOTE, JOHN. REGULATION OF GENDER DIFFERENTIATION IN DROSOPHILA MELANOGASTER (PCM-8202812); 12 MONTHS \$75,000
- HELINSKI, DONALD R. FACTORS CONTROLLING THE DUPLICATION OF CIRCULAR GENETIC ELEMENTS (PCM-8203001); 12 MONTHS \$90,000
- HELINSKI, DONALD R. ENHANCEMENT OF BIOLOGICAL NITROGEN FIXATION BY GENETIC MANIPULATION OF RHIZOBIUM (PCM-8204730); 12 MONTHS \$130,000
- DELUCA, MARLENE. CONVERSION OF CHEMICAL ENERGY INTO LIGHT ENERGY BY BIOLOGICAL SYSTEMS (PCM-8206748); 12 MONTHS \$53,000
- INSEL, PAUL A. REGULATION OF BETA-ADRENERGIC RECEPTORS AND RESPONSE (PCM-8207498); 12 MONTHS \$68,010
- KRAUT, JOSEPH, AND POULOS, THOMAS L. CRYSTALLOGRAPHIC STUDIES ON CYTOCHROME C PEROXIDASE (PCM-8208414); 12 MONTHS \$55,000
- UNIVERSITY OF CALIFORNIA, SAN FRANCISCO-SCHOOL OF MEDICINE
- LIE, KIAN JOE. CELLULAR DEFENSE REACTION IN BIOMPHALARIA GLABRATA: ULTRASTRUCTURAL STUDIES (PCM-8015833 A01); 12 MONTHS \$50,814
- KENNEY, WILLIAM C. MODIFIED FLAVINS AND OTHER NOVEL COFACTORS IN ENZYME FUNCTION (PCM-8108283 A01); 12 MONTHS \$36,000
- CALARCO, PATRICIA G. STAGE-SPECIFIC SURFACE ANTIGENS OF THE PREIMPLANTATION MOUSE EMBRYO (PCM-8115940 A01); 12 MONTHS \$65,000
- ZAKIM, DAVID. EFFECT OF PHOSPHOLIPID-PROTEIN INTERACTIONS ON THE FUNCTION OF MEMBRANE-BOUND ENZYMES (PCM-8204270); 12 MONTHS \$51,410
- UNIVERSITY OF CALIFORNIA, SAN FRANCISCO
- COFFINO, PHILIP, AND BOURNE, HENRY R. GROWTH REGULATION BY CYCLIC AMP (PCM-7807382 A04); 12 MONTHS \$125,000
- GUTHRIE, CHRISTINE. SPECIFICITY AND REGULATION OF TRNA PROCESSING ENZYMES (PCM-7912081 A02); 12 MONTHS \$44,859
- MORALES, MANUEL F. STUDIES OF CONTRACTILE SYSTEMS (PCM-7922174 A01); 12 MONTHS \$46,350
- LAN, NANCY T. Y. AND BAXTER, JOHN D. MECHANISMS OF GLUCOCORTICOID RECEPTOR FUNCTION (PCM-8004735 A02); 12 MONTHS \$60,000
- STROUD, ROBERT M. PROTEIN-LIPID AND PROTEIN-NUCLEIC ACID INTERACTIONS (PCM-8021433 A01); 12 MONTHS \$58,500
- RAMSAY, DAVID J. OROPHARYNGEAL MECHANISMS INVOLVED IN SATIATION OF THIRST AND CONTROL OF VASOPRESSIN SECRETION (PCM-8110816 A01); 12 MONTHS \$35,794
- SEDAT, JOHN W. STROUD, ROBERT M., ALBERTS, BRUCE M., AND KORNBERG, THOMAS B. ACQUISITION OF BIOLOGICAL INSTRUMENTATION EQUIPMENT: A SHARED HIGH PERFORMANCE IMAGE ACQUISITION AND DISPLAY SYSTEM (PCM-8115943); 12 MONTHS \$55,000
- RAMACHANDRAN, JANAKIRAM. IDENTIFICATION AND ISOLATION OF CORTICOTROPIN AND MELANOTROPIN RECEPTORS (PCM-8118633); 24 MONTHS \$100,000
- SINGER, THOMAS P. STRUCTURE AND MECHANISM OF ACTION OF OXIDIZING ENZYMES (PCM-8119609); 12 MONTHS \$42,000
- LEVY, JAY A. EFFECT OF TYPE C VIRUSES ON CELL DIFFERENTIATION (PCM-8120209); 12 MONTHS \$50,000
- O'FARRELL, PATRICK H. MOLECULAR ANALYSIS OF DEVELOPMENTAL MUTATIONS (PCM-8120531); 12 MONTHS \$73,000
- YAMAMOTO, KEITH R. POSITION, PACKAGING AND EXPRESSION OF MAMMALIAN GENES (PCM-8203072); 12 MONTHS \$85,000
- UNIVERSITY OF CALIFORNIA, SANTA BARBARA
- CANNELL, DAVID S. AND PURICH, DANIEL L. DIFFERENTIAL LASER PROBE OF CONFORMATIONAL CHANGES (PCM-7911008 A02); 12 MONTHS \$38,000
- CRONSHAW, JAMES, AND HOLMES, WILLIAM N. FUNCTIONAL SIGNIFICANCE OF INTERRENAL CELL ZONATION (PCM-7915777 A01); \$6,000
- CRONSHAW, JAMES, AND HOLMES, WILLIAM N. FUNCTIONAL SIGNIFICANCE OF ADRENOCORTICAL CELL ZONATION (PCM-7915777 A02); 24 MONTHS \$120,000
- BRUCE, THOMAS C. COFACTOR CATALYZED REACTIONS (PCM-8004816 A02); 12 MONTHS \$47,000
- TABORSKY, GEORGE. PRIMARY STRUCTURAL STUDIES OF PHOSVITINS (PCM-8011469 A01); 12 MONTHS \$47,000
- REED, STEVEN I. GENETIC ANALYSIS OF THE CONTROL OF CELL DIVISION IN YEAST (PCM-8102308 A01); 12 MONTHS \$44,371
- COLLINS, PETER M. SEXUAL DEVELOPMENT IN PRIMITIVE PRIMATES (PCM-8104108 A01); 12 MONTHS \$60,000
- ORIAS, EDUARDO. CONDITIONAL LETHAL MUTANTS OF TETRAHYMENA (PCM-8119753); 12 MONTHS \$40,000

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- BEEVERS, HARRY, ASPECTS OF PLANT METABOLISM (PCM-7819575 A02); 12 MONTHS \$83,000
- FINK, ANTHONY L. PROTEIN STRUCTURE AND FOLDING AT LOW TEMPERATURES (PCM-7913766 A02*); 12 MONTHS \$58,750
- TAIZ, LINCOLN; REGULATION OF CELL EXPANSION IN PLANTS (PCM-8001168 A02); 12 MONTHS \$65,442
- LUDWIG, ROBERT A. GENETICS OF RHIZOBIUM-LEGUMINOUS PLANT SYMBIOTIC NITROGEN FIXATION (PCM-8021591 A01); 12 MONTHS \$50,000
- FINK, ANTHONY L. LOW TEMPERATURE TRAPPING OF INTERMEDIATES IN ENZYME-CATALYZED REACTIONS (PCM-8110073 A01); 12 MONTHS \$45,000
- FELDMAN, JERRY F. GENETIC ANALYSIS OF BIOLOGICAL CLOCK MECHANISMS (PCM-8117869); 12 MONTHS \$70,000

UNIVERSITY OF SAN FRANCISCO

- CHIHARA, CAROL J. DEVELOPMENTAL GENETICS OF DROSOPHILA CUTICLE PROTEINS (PCM-8119181); 24 MONTHS \$60,000

UNIVERSITY OF SOUTHERN CALIFORNIA-SCHOOL OF MEDICINE

- STOHLMAN, STEPHEN A. MOLECULAR BIOLOGY OF CORONAVIRUSES (PCM-8110072 A01); 12 MONTHS \$37,000
- LIEB, MARGARET, AND DEONIER, RICHARD C. GENETIC EFFECTS OF IS ELEMENTS IN BACTERIOPHAGE LAMBDA (PCM-8110604); 12 MONTHS \$50,000
- FIFE, THOMAS H. MECHANISM OF ACTION OF HYDROLYTIC METAL-LOENZYMES (PCM-8112256); 12 MONTHS \$42,000

UNIVERSITY OF SOUTHERN CALIFORNIA

- TSUJI, FREDERICK I. BIOCHEMICAL STUDIES OF BIOLUMINESCENCE (PCM-7921658 A02); 12 MONTHS \$40,000
- DEONIER, RICHARD C. AND LIEB, MARGARET; TRANSPOSITIONAL AND GENERAL IS ELEMENT RECOMBINATION (PCM-8110605); 12 MONTHS \$56,939
- MCKENNA, CHARLES E. ACTIVE SITE OF NITROGENASE (PCM-8119152); 12 MONTHS \$55,000
- STEPHENS, PHILIP J. AND MCKENNA, CHARLES E. CHIROPTICAL SPECTROSCOPY OF NITROGENASE (PCM-8119154*); 12 MONTHS \$92,225
- DALTON, LARRY R. DEVELOPMENT OF SATURATION TRANSFER & TIME RESOLVED TECHNIQUES & THEIR APPLICATION TO THE HYDRODYNAMIC CHARACTERIZATION OF PROTEINS & SUPRAMOLECULAR COMPLEXES (CHEMISTRY) (CHE-8206112*); 12 MONTHS \$34,000

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AMERICAN CANCER RESEARCH CENTER AND HOSPITAL

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- BARISAS, B. GEORGE. LATERAL AND ROTATIONAL DYNAMICS OF MEMBRANE COMPONENTS (PCM-8111385 A01); 12 MONTHS \$55,240
- ELEANOR ROOSEVELT INSTITUTE FOR CANCER RESEARCH
- JONES, CAROL A. GENETIC ANALYSIS OF HUMAN CELL SURFACE RECEPTORS (PCM-8203860); 24 MONTHS \$90,000

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- RICKENBERG, HOWARD V. REGULATION OF ADENYLATE CYCLASE IN *D. DISCOIDEUM* (PCM-8205377); 24 MONTHS \$40,000

UNIVERSITY OF COLORADO AT BOULDER

- NORRIS, DAVID O. PITUITARY THYROID-GONADAL INTERACTIONS (PCM-7822335 A01); 12 MONTHS \$3,290
- SOLL, LARRY J. INITIATION OF DNA REPLICATION (PCM-7823225 A02); 12 MONTHS \$60,000
- SUEOKA, NOBORU. STRUCTURE OF THE REPLICATION ORIGIN OF BACILLUS SUBTILIS CHROMOSOME (PCM-8011549 A02); 12 MONTHS \$40,000
- MC INTOSH, J. RICHARD. STUDIES ON THE FORMATION AND FUNCTION OF THE MITOTIC SPINDLE (PCM-8014549 A02); 12 MONTHS \$55,000
- WYMAN, JEFFRIES. LIGAND BINDING BY BIOLOGICAL MACROMOLECULES (PCM-8013930 A01); 12 MONTHS \$34,000
- KANO-SUEOKA, TAMIKO. REGULATION OF CELL PROLIFERATION AND PHOSPHOETHANOLAMINE (PCM-8104480 A01); 12 MONTHS \$50,000
- DANNA, KATHLEEN J. SV40 EARLY PROTEINS: POSSIBLE ROLES IN ONCOGENESIS (PCM-8110366); 12 MONTHS \$60,000
- DANNA, KATHLEEN J. EARLY EVENTS IN THE BIOSYNTHESIS OF SV40 MRNA (PCM-8114678); 24 MONTHS \$70,000
- STAEHELIN, L. A. SUPRAMOLECULAR MAPPING OF FUNCTIONAL UNITS OF THYLAKOID MEMBRANES (PCM-8118627); 12 MONTHS \$45,000
- GLEESON, TODD T. CONTRACTILE AND METABOLIC PROPERTIES OF SKELETAL MUSCLE FIBERS (PCM-8202432); 24 MONTHS \$80,000

UNIVERSITY OF COLORADO HEALTH SCIENCES CENTER

- PETTJOHN, DAVID E. ROLE OF SPECIFIC NON-HISTONE CHROMOSOMAL PROTEINS IN CHROMOSOME STRUCTURE (PCM-7921406 A02); 12 MONTHS \$45,000
- SELITRENNIKOFF, CLAUDE P. CELL WALL ASSEMBLY MUTANTS OF NEUROSPORA CRASSA (PCM-8112212); 12 MONTHS \$50,000
- EVANS, ROBERT M. PHOSPHORYLATION OF INTERMEDIATE FILAMENTS DURING MITOSIS (PCM-8120029); 12 MONTHS \$50,000

CONNECTICUT

UNIVERSITY OF CONNECTICUT

- SCHUSTER, TODD M. AND PHILO, JOHN S. HEMEPROTEINS: STATIC AND RAPID KINETIC MAGNETIC STUDIES (PCM-7903964 A04); \$10,590
- KOSHER, ROBERT A. STUDIES ON LIMB DEVELOPMENT (PCM-7925907 A02); 12 MONTHS \$54,795
- ROBINSON, KENNETH R. IONIC AND ELECTRICAL CONTROL OF CELLULAR POLARITY (PCM-7926715 A02); 12 MONTHS \$45,700
- RENFRO, J. LARRY. RENAL DIVALENT ION TRANSPORT PROCESSES IN A MARINE TELEOST (PCM-8003952 A03); 12 MONTHS \$38,000
- SATTER, RUTH L. MECHANISMS OF LIGHT-CLOCK INTERACTION IN PLANT CELLS (PCM-8021623 A01); \$3,000
- PHILLIPS, ALVAH H. TURNOVER OF INTRACELLULAR MEMBRANES AND ITS ROLE IN SECRETION (PCM-8022071 A01); 12 MONTHS \$60,756
- CLARK, NANCY B. PARATHYROID STRUCTURE AND FUNCTION (PCM-8104037 A01); 12 MONTHS \$67,000
- YPHANTIS, DAVID A. ULTRACENTRIFUGAL APPROACHES FOR INTERACTING MACROMOLECULES (PCM-8111484 A01); 12 MONTHS \$63,000
- COOPERSTEIN, S. J. AND WATKINS, DUDLEY T. MECHANISM OF GLUCOSE-STIMULATED INSULIN SECRETION (PCM-8113042); 24 MONTHS \$200,000
- TANZER, MARVIN L. ACQUISITION OF EQUIPMENT FOR POLYPEPTIDE STRUCTURE AND FUNCTION STUDIES (PCM-8115664); 12 MONTHS \$30,000
- HIGHTOWER, LAWRENCE E. NDV INFECTION AND CELLULAR RESPONSES TO STRESS (PCM-8118285); 12 MONTHS \$60,000
- DAS, ASIS K. REGULATION OF THE RHO GENETIC LOCUS IN *E. COLI* (PCM-8118791); 24 MONTHS \$100,000
- BRONNER, FELIX. CALCIUM TRANSPORT INTESTINAL MEMBRANE VESICLES (PCM-8178948); 24 MONTHS \$81,074
- FRANK, HARRY A. ELECTRON PARAMAGNETIC RESONANCE STUDIES OF CAROTENOID TRIPLET STATES (PCM-8201746); 24 MONTHS \$131,000
- ROTHFIELD, LAWRENCE I. STUDIES OF BACTERIAL CELL DIVISION (PCM-8203516); 12 MONTHS \$60,001
- GLASEL, JAY A. PHYSICAL AND BIOLOGICAL STUDIES OF OPIATE AND PEPTIDE INTERACTIONS WITH RECEPTORS (PCM-8204864); 12 MONTHS \$44,000
- GOETINCK, PAUL F. THIRD INTERNATIONAL CONFERENCE ON LIMB DEVELOPMENT AND REGENERATION: MORPHOGENESIS, CYTODIFFERENTIATION AND DEVELOPMENTAL ANOMALIES, STORRS, CT, JUNE 27 - JULY 2, 1982 (PCM-8206365); 6 MONTHS \$3,500
- WAITE, JOHN H. POLYMERIZATION OF MUSSEL ADHESIVE AND ADHESION TO COLLAGEN IN VITRO (PCM-8206463); 12 MONTHS \$58,468

WESLEYAN UNIVERSITY

- TURNER, ROBERT S. THE 1982 NORTHEAST REGIONAL CONFERENCE ON DEVELOPMENTAL BIOLOGY MARCH 19-21, 1982, WOODS HOLE OCEANOGRAPHIC INSTITUTION, WOODS HOLE, MASSACHUSETTS (PCM-8119160); 12 MONTHS \$1,700

YALE UNIVERSITY-SCHOOL OF MEDICINE

- COLEMAN, JOSEPH E. AND ARMITAGE, IAN M. ELECTRONIC AND MAGNETIC PROPERTIES OF MACROMOLECULES (PCM-7912269 A02); 12 MONTHS \$28,800
- SLAYMAN, CLIFFORD L. DIRECT ELECTRICAL STUDIES ON ENERGY COUPLING AND TRANSPORT IN GIANT *ESCHERICHIA COLI* (PCM-7913412 A02); 12 MONTHS \$77,910
- COLE, CHARLES N. CONTROL OF TUMOR VIRUS GENE EXPRESSION (PCM-8021805 A01); 12 MONTHS \$60,000

YALE UNIVERSITY

- ENGELMAN, DONALD M. AND MOORE, PETER B. NEUTRON DIFFRACTION STUDIES OF QUATERNARY STRUCTURE (PCM-7810361 A04); 12 MONTHS \$72,000
- MARKERT, CLEMENT L. PRODUCTION OF HOMOZYGOUS MAMMALS BY MICROSURGERY ON EGGS (PCM-7910054 A02); 6 MONTHS \$10,000
- CONE, ROBERT E. MOLECULAR BASIS OF T LYMPHOCYTE RECOGNITION (PCM-7921779 A02); 12 MONTHS \$45,035
- COLSON, STEVEN D. AND CROTHERS, DONALD M. EXCITED STATE PROPERTIES OF NUCLEOSIDE ANALOGS (PCM-8006989 A02); 12 MONTHS \$32,400
- SHULMAN, ROBERT G. NMR STUDIES OF YEAST CELLS AND SPORES (PCM-8021715 A01); 12 MONTHS \$115,200
- ROSENBAUM, JOEL L. MICROTUBULE-ASSOCIATED PROTEINS (MAPS) (PCM-8104165 A01); 12 MONTHS \$55,000
- ORNSTON, L. NICHOLA. NOVEL MUTATIONS IN METABOLIC EVOLUTION (PCM-8110075*); 12 MONTHS \$72,000
- GOLDSMITH, MARY H. AND GOLDSMITH, TIMOTHY H. ORIGIN AND REGULATION OF THE ELECTRICAL PROPERTIES OF THE PLASMA MEMBRANE AND TONOPLAST OF CELLS OF OAT SEEDLINGS (PCM-8110380); 12 MONTHS \$34,172
- STEITZ, THOMAS A. STRUCTURAL BASIS OF MOLECULAR MECHANISM OF CELLULAR CONTROL (PCM-8110880 A01); 12 MONTHS \$65,700
- STURTEVANT, JULIAN M. THE THERMODYNAMICS OF BIOCHEMICAL AND BIOLOGICAL PROCESSES (PCM-8117341); 12 MONTHS \$56,883
- SLAYMAN, CAROLYN W. CHARACTERIZATION OF THE PLASMA MEMBRANE ATPASE OF *NEUROSPORA CRASSA* (PCM-8117707*); 24 MONTHS \$90,000
- SOLL, DIETER G. GENE STRUCTURE AND REGULATION OF AMINOACYL-TRNA SYNTHETASE (PCM-8120356); 12 MONTHS \$75,000
- SOLL, DIETER G. GENE STRUCTURE AND REGULATION OF AMINOACYL-TRNA SYNTHETASE (PCM-8120356 A01); \$3,200

- ALTMAN, SIDNEY. STUDIES OF RIBONUCLEASE P AND OTHER (RIBONUCLEO) PROTEINS RELATED TO RNA PROCESSING (PCM-8120788); 12 MONTHS \$55,000
- MARKERT, CLEMENT L. 4TH INTERNATIONAL CONGRESS ON ISOZYMES, JUNE 14-19, 1982. UNIVERSITY OF TEXAS, AUSTIN, TX (04M-8211633*); 6 MONTHS \$2,500

DELAWARE

UNIVERSITY OF DELAWARE

- WHITE, HAROLD B. BIOTIN-BINDING PROTEIN: STRUCTURE AND FUNCTION (PCM-7920683 A02); 12 MONTHS \$60,000
- SHEPPARD, DAVID E. THE GENETIC CONTROL OF THE L-ARABINOSE OPERON IN *E. COLI* B-R (PCM-8104116); 12 MONTHS \$43,404
- STETSON, MILTON H. PHOTO-NEURO-ENDOCRINE INTERACTIONS IN THE REGULATION OF REPRODUCTION (PCM-8111384 A01); 12 MONTHS \$75,000
- COLMAN, ROBERTA F. AFFINITY LABELING OF PURINE NUCLEOTIDE SITES IN PROTEINS (PCM-8301969); 12 MONTHS \$60,000

DISTRICT OF COLUMBIA

CARNEGIE INSTITUTION OF WASHINGTON

- THOMPSON, WILLIAM F. TRANSCRIPTION OF CHLOROPLAST DNA DURING CHLOROPLAST DEVELOPMENT (PCM-8109795 A01); 12 MONTHS \$82,500
- FEDOROFF, NINA V. THE MOLECULAR BIOLOGY OF CONTROLLING ELEMENTS IN MAIZE (PCM-8307708); 12 MONTHS \$60,000

GEORGE WASHINGTON UNIVERSITY

- KUMAR, AJIT. REGULATION OF RIBOSOME METABOLISM IN MAMMALIAN CELLS (PCM-8210176); 12 MONTHS \$50,000

GEORGE WASHINGTON UNIVERSITY-MEDICAL CENTER

- STOKES, GERALD V. ATTACHMENT RECEPTORS OF CHLAMYDIA TRACHOMATIS AND *C. PSITTACI* (PCM-8208383); 24 MONTHS \$75,000

GEORGETOWN UNIVERSITY

- LANDMAN, OTTO E. DNA PROCESSING AND DNA-MEMBRANE ASSOCIATION DURING TRANSFORMATION (PCM-7905318 A02); 24 MONTHS \$51,240

- MAC GREGOR, CAROLYN H. ASSEMBLY AND REGULATION OF AN INTEGRAL MEMBRANE PROTEIN (PCM-7920680 A02); 12 MONTHS \$35,000

- NISHIOKA, DAVID J. THE EFFECTS OF INTRACELLULAR PH ON THE SYNTHESIS OF DNA IN FERTILIZED SEA URCHIN EGGS (PCM-7923487 A02); 12 MONTHS \$24,236

- YANG, DAVID C. INTERACTION OF MAMMALIAN AMINOACYL-TRNA SYNTHETASES (PCM-8110818); 12 MONTHS \$35,000

- UNDERHILL, CHARLES B. BINDING SITES FOR HYALURONATE ON THE CELL SURFACE (PCM-8303995); 6 MONTHS \$19,600

- UNDERHILL, CHARLES B. BINDING SITES FOR HYALURONATE ON THE CELL SURFACE (PCM-8303995 A01); 12 MONTHS \$50,660

GEORGETOWN UNIVERSITY-SCHOOL OF MEDICINE

- KASBEKAR, DINKAR K. CYTOSKELETAL ELEMENTS AND GASTRIC OXYNTIC CELL SECRETION (PCM-8114897 A01); 12 MONTHS \$42,694

HOWARD UNIVERSITY-COLLEGE OF MEDICINE

- SWIFT, MARY L. GLYCOCEN METABOLISM IN THE OYSTER, *CRASSOSTREA VIRGINICA* (PCM-8118227); 24 MONTHS \$81,316

NATIONAL ACADEMY OF SCIENCES-NATIONAL RESEARCH COUNCIL

- LAZEN, ALVIN G. PARTIAL SUPPORT OF THE INSTITUTE OF LABORATORY ANIMAL RESOURCES (PCM-8019238 A01); 12 MONTHS \$31,000

FLORIDA

FLORIDA STATE UNIVERSITY

- TSCHINKEL, WALTER R. SOCIAL REGULATION OF FERTILITY IN THE FIRE ANT QUEEN (PCM-8022077 A01); 12 MONTHS \$42,000

- OUTLAW, WILLIAM H. GUARD CELL BIOLOGY (PCM-8119109); 12 MONTHS \$61,000

- FREEMAN, MARC E. THE PHYSIOLOGICAL INHIBITION OF LUTEINIZING HORMONE RELEASE (PCM-8120408); 12 MONTHS \$32,719

- ELLINGTON, WILLIAM R. ENERGY METABOLISM IN MOLLUSCAN HEARTS (PCM-8202370); 12 MONTHS \$53,403

- POTTS, MALCOLM. REGULATION OF NITROGEN METABOLISM IN CYANOBACTERIA UNDERGOING WATER STRESS (PCM-8203709); 24 MONTHS \$73,898

UNIVERSITY OF FLORIDA-AGRICULTURAL EXPERIMENTAL STATION

- FIELDS, MICHAEL J. BOVINE RELAXIN - ORIGIN AND SECRETION (PCM-8110062 A01); 12 MONTHS \$72,150

UNIVERSITY OF FLORIDA-COLLEGE OF MEDICINE

- FELDHERR, CARL M. ENDOGENOUS PROTEIN EXCHANGES ACROSS THE NUCLEAR ENVELOPE (PCM-8003697 A02); 12 MONTHS \$40,000

- SELMAN, KELLY E. OOCYTE GROWTH IN TELEOSTS (PCM-8003909 A01); 12 MONTHS \$35,000

- COHEN, ROBERT J. ROLE OF CYCLIC NUCLEOTIDES IN THE RESPONSE SYSTEM OF *PHYCOMYCES BLAKESLEEANUS* (PCM-8017665 A01); 12 MONTHS \$35,000

- STEIN, GARY S. AND STEIN, JANET L. CONTROL OF HISTONE GENE EXPRESSION IN MAMMALIAN CELLS (PCM-8018075 A02); 12 MONTHS \$50,000

- ROBERTS, R MICHAEL. CONTROL OF PLASMA MEMBRANE POLYPEPTIDE TURNOVER (PCM-8104071 A01); 12 MONTHS \$38,000

- STEIN, JANET L. CONTROL OF GENE EXPRESSION DURING THE CELL CYCLE (PCM-8118951*); 24 MONTHS \$80,000

- HAUSWIRTH, WILLIAM W. MOLECULAR MECHANISM OF MITOCHONDRIAL DNA INHERITANCE (PCM-8119166); 12 MONTHS \$55,000

- WALLACE, ROBIN A. HYDRATION OF TELEOST OOCYTES. EXPLORATION FOR OPERANT MECHANISMS (PCM-8202512); 12 MONTHS \$22,271

UNIVERSITY OF FLORIDA

- SHIREMAN, RACHEL. CHARACTERIZATION OF THE TRANSFER OF VARIOUS HYDROPHOBIC COMPOUNDS INTO CELLS (PCM-8103263 A01); 12 MONTHS \$49,712

- SHANMUGAM, K T. REGULATION OF NITROGEN FIXATION BY INTERMEDIATES OF DENITRIFICATION (PCM-8118350); 24 MONTHS \$66,960

- PUEPPKE, STEVEN G. INCEPTION OF THE NITROGEN-FIXING SOY-BEAN-RHIZOBIUM SYMBIOSIS: GENETIC AND BIOCHEMICAL ANALYSIS (PCM-8200110); 24 MONTHS \$45,161

- KILBERG, MICHAEL S. ADAPTIVE PROCESSES FOR AMINO ACID UPTAKE BY LIVER CELLS (PCM-8203748); 12 MONTHS \$35,209

- INGRAM, LONNIE O. ALCOHOL PRODUCTION BY *ZYMONOMAS MOBILIS*: GENETIC AND BIOCHEMICAL IMPROVEMENTS (PCM-8204928); 24 MONTHS \$90,000

- ESSER, ALFRED F. COMPLEMENT ACTIVATION ON LIPID BILAYER MEMBRANES (PCM-8242116*); 18 MONTHS \$54,000

UNIVERSITY OF MIAMI-SCHOOL OF MARINE & ATMOSPHERIC SCIENCES

- MITSUMI, AKIRA. USE OF MARINE BLUE-GREEN ALGAE FOR AQUACULTURE (PCM-8202429); 12 MONTHS \$103,297

UNIVERSITY OF MIAMI-SCHOOL OF MEDICINE

- CHAMBERS, EDWARD L. IONIC MECHANISMS IN THE INITIATION OF DEVELOPMENT (PCM-7806178 A02); 12 MONTHS \$75,000

UNIVERSITY OF MIAMI

- CARRAWAY, KERMIT L. STRUCTURE, SHEDDING AND BIOSYNTHESIS OF A MUCIN-TYPE CELL SURFACE GLYCOPROTEIN (PCM-8140969 A01); 12 MONTHS \$19,732

UNIVERSITY OF SOUTH FLORIDA

- MICHAELS, ALLAN. HYBRIDIZATION-SELECTION OF THYLAKOID PROTEIN MRNA AND THE REGULATION OF CHLOROPLAST GENE EXPRESSION IN *CHLAMYDOMONAS REINHARDTII* (PCM-8022647 A01); 12 MONTHS \$37,000

- HINSCH, GERTRUDE W. 24TH SOUTHEASTERN DEVELOPMENT BIOLOGY CONFERENCE MAY 3-4, 1982, ST. PETERSBURG BEACH, FLORIDA (PCM-8117520); 7 MONTHS \$2,000

GEORGIA

EMORY UNIVERSITY

- NUTTALL, ROBERT P. MOTILITY, BEHAVIOR, AND CONTACT INTERACTIONS IN CULTURED EMBRYONIC NEURONS (PCM-7926681 A02); 12 MONTHS \$37,385

- EDMONDSON, DALE E. STRUCTURE AND ROLE OF COVALENT PHOSPHORUS RESIDUES IN AZOTOBACTER FLAVODOXIN (PCM-8100770 A01); 12 MONTHS \$42,000

- GORDON, THOMAS P. ENDOCRINE CONTROL OF SEASONAL REPRODUCTION (BNS-8112248 A01*); 12 MONTHS \$50,000

EMORY UNIVERSITY-SCHOOL OF MEDICINE

- SHAPIRA, RAYMOND, AND WU, GUANG JER. SPLICED MRNA AND RODENT MYELIN BASIC PROTEINS (PCM-7916169 A01); 12 MONTHS \$26,000

- BAUMSTARK, BARBARA R. INTERACTION OF THE P1CL REPRESSOR WITH P1 DNA (PCM-8009355 A01); 12 MONTHS \$50,000

- SALE, WINFIELD S. EXPERIMENTAL STUDY OF FLAGELLAR DYNEIN (PCM-8119097); 12 MONTHS \$45,000

GEORGIA STATE UNIVERSITY

- ABDELAL, AHMED T. REGULATION OF CARBAMYLPHOSPHATE SYNTHESIS IN MICROORGANISMS (PCM-8016600 A02); 12 MONTHS \$50,000

- SMITHWICK, ELEANOR B. ACQUISITION OF TRANSMISSION ELECTRON MICROSCOPE (PCM-8200262); 12 MONTHS \$60,000

MEDICAL COLLEGE OF GEORGIA

- HOWARD, EUGENE F. SMALL MOLECULAR WEIGHT NUCLEAR RNA (PCM-7918339 A02); 12 MONTHS \$30,000

- WILSON, JOHN T. STRUCTURAL ANALYSIS OF HUMAN ANTITRYPSIN GENE (PCM-8021407 A01); 12 MONTHS \$55,000

MEDICAL COLLEGE OF GEORGIA RESEARCH INST INC

- TISCHFIELD, JAY A. GENE STRUCTURE, FUNCTION AND MUTAGENESIS (PCM-8118283); 12 MONTHS \$75,000

MOREHOUSE COLLEGE

- MANN, DAVID R. MODULATORY ACTIONS OF ACTH ON REPRODUCTION (PCM-8119783); 24 MONTHS \$120,000

- CHEW, CATHERINE S. ACQUISITION OF A LIQUID SCINTILLATION COUNTER (PCM-8207601); 12 MONTHS \$35,000

UNIVERSITY OF GEORGIA

- CORMIER, MILTON J. ROLE OF CALCIUM DEPENDENT MODULATOR PROTEIN IN PLANTS (PCM-7905043 A02); 12 MONTHS \$60,838

- CORMIER, MILTON J. CA2 DEPENDENT REGULATION OF COELENTERATE BIOLUMINESCENCE (PCM-8007672 A02); 12 MONTHS \$55,000

- WAMPLER, JOHN E. STUDIES AND APPLICATIONS OF EARTHWORM BIOLUMINESCENCE (PCM-8012433 A02); 12 MONTHS \$35,000

- DURE, LEON S. DEVELOPMENTAL BIOCHEMISTRY OF PLANT SEED EMBRYOGENESIS AND GERMINATION (PCM-8012766 A02); \$3,000

PECK, HARRY D. AND PAYNE, WILLIAM J. *THE BIOCHEMISTRY AND PHYSIOLOGY OF NITRATE RESPIRATION* (PCM-8018308 A01; 12 MONTHS \$42,000)

PRATT, LEE H. *PHYTOCHROME LOCALIZATION: VISUALIZATION BY IMMUNOCYTOCHEMISTRY* (PCM-8022159 A01*; 36 MONTHS \$15,000)

PRATT, LEE H. *PHYTOCHROME LOCALIZATION: VISUALIZATION BY IMMUNOCYTOCHEMISTRY* (PCM-8022159 A02; 12 MONTHS \$50,486)

SHIMMELT, GREGORY W. *REGULATION OF CYTOPLASMIC SYNTHESIS OF CHLOROPLAST PROTEINS* (PCM-8023074 A01; 12 MONTHS \$45,000)

BLACK, CLANTON C. *PATHWAYS OF CARBON DIOXIDE, NITRATE, SULFATE, AND PHOSPHATE ASSIMILATION IN HIGHER PLANT LEAVES* (PCM-8023949 A01; 12 MONTHS \$68,000)

PALEVITZ, BARRY A. *THE CYTOSKELETON AND MEMBRANES IN PLANT CELLS* (PCM-8104470 A01; 12 MONTHS \$70,301)

LEGALL, JEAN, DER VART, NIAI, DANIEL V. AND PECK, HARRY D. *HYDROGEN METABOLISM IN THE SULFATE REDUCING BACTERIA, DESULFOVIBRIO* (PCM-8111325; 12 MONTHS \$75,000)

DURE, LEON S. *INTERNATIONAL CONFERENCE ON PLANT MOLECULAR BIOLOGY LAKE* (PCM-8118256*); 12 MONTHS \$3,000

RAWSON, JAMES R. *CHARACTERIZATION OF GENES THAT ARE EXPRESSED DURING CHLOROPLAST DEVELOPMENT* (PCM-8200949; 12 MONTHS \$72,000)

JERNSTEDT, JUDITH A. *MORPHOGENESIS OF CONTRACTILE ROOTS IN HYACINTHUS AND GLADIOLUS* (PCM-8202756; 24 MONTHS \$55,000)

DURE, LEON S. *DEVELOPMENTAL BIOCHEMISTRY OF PLANT SEED EMBRYOGENESIS AND GERMINATION* (PCM-8202926; 12 MONTHS \$70,000)

CRIM, JOE W. *LOWER VERTEBRATE GONADOTROPIN-RELEASING FACTOR ACTIVITY* (PCM-8203970; 12 MONTHS \$40,000)

PECK, HARRY D. *THE UTILIZATION OF INORGANIC PYROPHOSPHATE AS A SOURCE OF ENERGY FOR THE GROWTH OF BACTERIA* (PCM-8205593; 12 MONTHS \$63,451)

MEAGHER, RICHARD B. *SOYBEAN ACTIN GENE FAMILY: STRUCTURE AND EXPRESSION OF PLANT ACTIN GENES* (PCM-8208373; 12 MONTHS \$18,000)

LEE, JOHN W. *ENERGY CONVERSION MECHANISMS IN BIOLUMINESCENCE* (PCM-8208534; 12 MONTHS \$36,000)

HAWAII

UNIVERSITY OF HAWAII-MANOA

YAMAMOTO, HARRY Y. *BIOCHEMISTRY AND ORGANIZATION OF CAROTENOIDS IN HIGHER PLANTS* (PCM-7822133 A02; 12 MONTHS \$41,713)

ROSEN, LEON; INSECTS, RHADOVIRUSES, AND HEREDITARY SENSITIVITY TO CO₂ (PCM-8010675 A02; 12 MONTHS \$60,000)

ALLEN, RICHARD D. *MEMBRANE DYNAMICS IN INTRACELLULAR DIGESTION* (PCM-8110802 A01; 12 MONTHS \$62,220)

AHEARN, GREGORY A. *COMPARATIVE GASTROINTESTINAL TRANSPORT PHYSIOLOGY OF CRUSTACEANS* (PCM-8118366; 12 MONTHS \$74,000)

AHEARN, GREGORY A. *COMPARATIVE GASTROINTESTINAL TRANSPORT PHYSIOLOGY OF CRUSTACEANS* (PCM-8118366 A01; \$8,334)

FOK, AGNES K. AND ALLEN, RICHARD D. *CELLULAR MEMBRANE RECYCLING* (PCM-8201700; 12 MONTHS \$35,000)

LYTTLE, TERRENCE W. *GENETIC DISSECTION OF DISTURBANCES OF MEIOSIS AND SPERMATOGENESIS IN DROSOPHILA* (PCM-8207853; 12 MONTHS \$50,000)

IDAHO

UNIVERSITY OF IDAHO

OLIVER, DAVID J. *METABOLITE TRANSPORT BY MITOCHONDRIA PEAS AND CORN* (PCM-8204186; 24 MONTHS \$10,240)

OLIVER, DAVID J. *METABOLITE TRANSPORT BY MITOCHONDRIA OF PEAS AND CORN* (PCM-8204186 A01; 24 MONTHS \$49,807)

ILLINOIS

EASTERN ILLINOIS UNIVERSITY

CARLSON, RUSSELL W. *RHIZOBIUM-LEGUME SYMBIOSIS* (PCM-8104481 A01; 12 MONTHS \$31,622)

ILLINOIS INSTITUTE OF TECHNOLOGY

BUSH, C. A. *OPTICAL ACTIVITY AND THE CONFORMATION OF COMPLEX OLIGOSACCHARIDES* (PCM-7918887 A03; 12 MONTHS \$45,900)

LOYOLA UNIVERSITY OF CHICAGO-STRICTH SCHOOL OF MEDICINE

O'MORCHOE, CHARLES C. *MECHANISM OF LYMPH FORMATION* (PCM-8021185 A01; 12 MONTHS \$51,158)

NORTHWESTERN UNIVERSITY-CHICAGO CAMPUS-MEDICAL SCHOOL

GOLDMAN, ROBERT D. *THE NEURONAL CYTOSKELETON (BNS-8023922 A01*); 12 MONTHS \$25,000*

NORTHWESTERN UNIVERSITY

HOFFMAN, BRIAN M. *METALLOPORPHYRINS AND METAL-SUBSTITUTED OXYGEN-BINDING HEMOPROTEINS* (PCM-7922178 A02; 12 MONTHS \$48,000)

PIER, E. SUSAN K. *SPECIFICITY AND FUNCTIONAL POTENTIAL OF INDIVIDUAL HELPER T LYMPHOCYTES* (PCM-8104469 A01; 12 MONTHS \$52,154)

LOACH, PAUL A. *CHARACTERIZATION OF BACTERIAL PHOTOSYNTHESIS: INSIGHTS FROM CHEMICAL MODELS* (PCM-8110620; 12 MONTHS \$70,000)

HOFFMAN, BRIAN M. *ACQUISITION OF EPR/ENDOR SPECTROMETER SYSTEM* (PCM-8116106; 12 MONTHS \$140,000)

SPIESS, LURETTA D. *BACTERIAL REGULATIONS OF MUCUS DEVELOPMENT* (PCM-8207774; 24 MONTHS \$90,000)

RUSH-PRESBYTERIAN-ST LUKE'S MEDICAL CENTER

MORLEY, COLIN G. *THE UPTAKE OF IRON BY LIVER PARENCHYMAL CELLS* (PCM-8001195 A01; 12 MONTHS \$54,484)

MORLEY, COLIN G. *THE UPTAKE OF IRON BY LIVER PARENCHYMAL CELLS* (PCM-8001195 A02; 12 MONTHS \$60,000)

UNIVERSITY OF CHICAGO

EPSTEIN, WOLFGANG. *MONOVALENT CATION TRANSPORT IN E. COLI* (PCM-7904641 A02; 12 MONTHS \$48,000)

METS, LAURENS J. *CORRELATED PHYSICAL AND GENETIC MAPPING OF CHLOROPLAST DNA* (PCM-8022722 A01; \$40,000)

METS, LAURENS J. *CORRELATED PHYSICAL AND GENETIC MAPPING OF CHLOROPLAST DNA* (PCM-8022722 A02; 12 MONTHS \$50,000)

HEINRIKSON, ROBERT L. *ON THE ACTIVE SITE AND GLOBULAR DOMAINS OF RHODANASE* (PCM-8025508 A01; 12 MONTHS \$33,000)

ELDER, ROBERT T. *REGULATED EXPRESSION OF THE YEAST TRANSPOSABLE ELEMENT TY1* (PCM-8108870 A01; 12 MONTHS \$55,000)

WESTLEY, JOHN. *MOLECULAR MECHANISMS OF ENZYMIC SULFUR TRANSFER AND ENZYMIC MEMORY* (PCM-8116006; 12 MONTHS \$50,000)

FRENKEL, NIZA. *FUNCTIONS EXPRESSED BY DEFECTIVE HERPES SIMPLEX VIRUS* (PCM-8118309; 12 MONTHS \$55,000)

LAUDER, GEORGE V. *PHYSIOLOGICAL MECHANISMS OF AQUATIC PREY CAPTURE IN RAY-FINNED FISHES* (PCM-8121649; 12 MONTHS \$30,000)

SHAPIRO, JAMES A. *GENETIC MANIPULATION OF HYDROCARBON-OXIDIZING PSEUDOMONAS* (PCM-8200971; 12 MONTHS \$90,000)

SIGLER, PAUL B. *PROTEIN-MEMBRANE INTERACTIONS* (PCM-8203539; 12 MONTHS \$50,000)

OVERTON, JANE. *CELL-CELL AND CELL-SUBSTRATE ADHESION* (PCM-8208256; 24 MONTHS \$90,000)

MOSCONA, A. A. *PHENOTYPE CONVERSION IN DIFFERENTIATED NEURAL RETINA CELLS* (PCM-8209360; 24 MONTHS \$100,000)

UNIVERSITY OF ILLINOIS AT CHICAGO CIRCLE

SHAPIRO, STANLEY K. *METABOLISM AND FUNCTIONS OF S-ADENOSYLMETHIONINE* (PCM-7727123 A02; 12 MONTHS \$30,603)

LIEBMAN, SUSAN W. *THE DEL 1 MUTATOR IN YEAST* (PCM-7904584 A02; 12 MONTHS \$60,910)

ANDERSON, LOUISE E. *METABOLIC REGULATION IN PHOTOSYNTHETIC ORGANISMS* (PCM-8005618 A01; 12 MONTHS \$59,935)

GASSMAN, MERRILL L. *ENZYMATIC OXIDATION AND BREAKDOWN OF PORPHYRINS* (PCM-8204548; 24 MONTHS \$11,022)

UNIVERSITY OF ILLINOIS AT URBANA

REBEIZ, CONSTANTIN A. *CHLOROPHYLL BIOSYNTHESIS: THE REACTIONS BETWEEN MG-PROTOPORPHYRIN MONOESTER AND PROTOCHLOROPHYLLIDE* (PCM-7811559 A04; 12 MONTHS \$25,000)

KAPLAN, SAMUEL. *BACTERIAL CHROMATOPHORE FORMATION* (PCM-7819592 A02; 12 MONTHS \$46,000)

OLDFIELD, ERIC. *NUCLEAR MAGNETIC RESONANCE STUDIES OF THE STRUCTURE OF MODEL AND BIOLOGICAL MEMBRANES* (PCM-7823021 A03; \$10,000)

GOVINDJEE, J. *ROLE OF BICARBONATE IN REGULATING PHOTOSYNTHETIC ELECTRON FLOW* (PCM-7824532 A02; 12 MONTHS \$43,150)

FRAUENFELDER, HANS, DEBRUNNER, PETER G. AND EISENSTEIN, LAURA. *PHYSICAL STUDIES OF BIOMOLECULES* (PCM-7905072 A02; 12 MONTHS \$85,275)

HANSON, JOHN B. *METABOLIC MECHANISMS OF PLANT RESPONSE TO LOW WATER POTENTIALS* (PCM-7909790 A02; 12 MONTHS \$48,530)

GUTOWSKY, H. S. *NUCLEAR MAGNETIC RESONANCE* (PCM-7911148 A02; 12 MONTHS \$49,500)

HANSON, JOHN B. *INCREASED ION ABSORPTION RATES INDUCED BY WASHING OF ROOT TISSUE* (PCM-7913406 A02; 12 MONTHS \$51,660)

PROSSER, C. LADD. *PHYSIOLOGICAL MECHANISMS OF TEMPERATURE ADAPTATION IN FISHES* (PCM-7914186 A02; 12 MONTHS \$50,000)

CAMERON, JO ANN. *SOURCE OF MYOBLASTS IN AMPHIBIAN MUSCLE REGENERATION* (PCM-7919338 A02; 12 MONTHS \$40,000)

SHAPIRO, DAVID J. *CONTROL OF GENE EXPRESSION IN HORMONE DEPENDENT DIFFERENTIATION* (PCM-7920671 A02; 12 MONTHS \$65,000)

DICKINSON, DAVID B. *METABOLISM OF MYO-INOSITOL AND D-GLUCURONIC ACID AS RELATED TO PLANT CELL GROWTH* (PCM-7922686 A01; \$45,920)

BAHR, JANICE M. AND CALVO, FRANCISCO. *MECHANISM OF HORMONE ACTION IN OVARIAN FOLLICLES* (PCM-7922687 A02; 12 MONTHS \$42,136)

OLDFIELD, ERIC. *CARBON-13 NMR OF LABELLED PROTEIN CRYSTALS* (PCM-7923170 A02; 12 MONTHS \$54,000)

CRONAN, JOHN E. *METABOLIC FUNCTION OF PROTEIN-LIPID INTERACTION* (PCM-7925689 A02; 12 MONTHS \$39,000)

WRIGHT, COLIN A. *CHARGE STABILIZATION PROCESSES IN PHOTOSYNTHESIS* (PCM-8012032 A02; 12 MONTHS \$1,300)

SWITZER, ROBERT L. *STRUCTURE AND FUNCTION OF A NOVEL IRON-SULFUR PROTEIN* (PCM-8013476 A02; 12 MONTHS \$32,000)

KAPLAN, SAMUEL. *THE REGULATION OF BACTERIAL CHROMATOPHORE FORMATION* (PCM-8020799 A01; 12 MONTHS \$40,000)

MORRISON, DONALD A. *RECOMBINATION MECHANISMS IN PNEUMOCOCCAL TRANSFORMATION* (PCM-8021425 A01; 12 MONTHS \$36,331)

HO, TUAN-HUA D. *ACTION OF HORMONES IN PLANT DEVELOPMENT* (PCM-8021632 A01; 12 MONTHS \$55,840)

RAMIREZ, VICTOR D. *NEUROENDOCRINE CONTROL OF LH RH SECRETION* (PCM-8106276; 12 MONTHS \$60,000)

GARDNER, JEFFREY F. *GENETIC REGULATION OF THE THREONINE OPERON OF ESCHERICHIA COLI* (PCM-8107192 A01; 12 MONTHS \$65,000)

- NARDI, JAMES B; GUIDANCE OF NEURONAL OUTGROWTH (PCM-8108852 A01); 12 MONTHS \$35,000
- WIDHOLM, JACK M; SELECTION AND CHARACTERIZATION OF AUXOTROPHIC PLANT CELL CULTURES (PCM-8109808 A01); 12 MONTHS \$55,000
- DEVAULT, DON C; BIOLOGICAL REACTIONS OF LESS THAN MICROLECOND HALFTIMES (PCM-8109854); 24 MONTHS \$77,000
- GIBORI, GEULA; ROLE OF THE DECIDUA IN THE REGULATION OF CORPUS LUTEUM FUNCTION (PCM-8112225); 12 MONTHS \$50,000
- CHAKRABARTY, ANANDA M; DEGRADATIVE HYDROCARBON PLASMIDS (PCM-8113558); 12 MONTHS \$80,000
- OLDFIELD, ERIC; NUCLEAR MAGNETIC RESONANCE STUDIES OF THE STRUCTURE OF MODIFIED AND BIOLOGICAL MEMBRANES (PCM-8117813); 12 MONTHS \$66,000
- WOLFE, RALPH S; METHYL-TRANSFER REACTIONS IN METHANOGENS AND ACETOGENS (PCM-8118178); 12 MONTHS \$50,000
- BUELOW, DENNIS E; BIOGENESIS OF PHOTOSYNTHETIC MEMBRANES (PCM-8118612); 12 MONTHS \$40,000
- RINEHART, KENNETH L; PURCHASE OF A HIGH FIELD FAST ATOM BOMBARDMENT MASS SPECTROMETER (PCM-8121494*); 12 MONTHS \$50,000
- BAHR, JANICE M; ACQUISITION OF A LIQUID SCINTILLATION COUNTER (PCM-8200072*); 12 MONTHS \$20,000
- ORDAL, GEORGE W; MECHANISM OF ACTION OF CHEMOTACTIC REPELLENTS OF *BACILLUS SUBTILIS* (PCM-8200760); 12 MONTHS \$50,000
- EBREY, THOMAS G; LIGHT ENERGY TRANSDUCTION IN THE PURPLE MEMBRANE OF *HALOBACTERIUM HALOBIVM* (PCM-8201924); 12 MONTHS \$55,000
- WILLIS, JUDITH H; HORMONE INTERACTION DURING INSECT METAMORPHOSIS (PCM-8201934); 24 MONTHS \$116,000
- UHLERBECK, OLKE C; T₄ POLYNUCLEOTIDE KINASE AND RNA LIGASE (PCM-8201987); 12 MONTHS \$50,000
- FRAENKEL, GOTTFRIED S; HORMONAL CONTROL OF DEVELOPMENT IN FLIES (PCM-8202781); 12 MONTHS \$34,989
- VOSS, EDWARD W; I₂ AFFINITY: BIOCHEMISTRY, GENETICS AND BIOLOGY (PCM-8203421); 24 MONTHS \$75,000
- BOUCK, G BENJAMIN; COMPARATIVE AND DEVELOPMENTAL ANALYSIS OF SURFACE DOMAINS (PCM-8204442); 12 MONTHS \$50,000
- HAGER, LOWELL P; BIOLOGICAL HALOGENATION MECHANISMS (PCM-8209325); 12 MONTHS \$45,000
- UNIVERSITY OF ILLINOIS MEDICAL CTR AT CHICAGO
- LANDS, WILLIAM E; PEROXIDE ACTIONS ON PROSTAGLANDIN BIOSYNTHESIS (PCM-8015638 A01); 12 MONTHS \$68,511

INDIANA

INDIANA STATE UNIVERSITY

- ALBRIGHT, JOSEPH F; NOVEL SUPPRESSION OF IMMUNITY MEDIATED BY TRYPAPOSOMES (PCM-8017183 A02); 12 MONTHS \$48,000
- DUSANIC, DONALD G; IMMUNOLOGICAL REGULATION AND CONTROL OF RODENT TRYPAPOSOME INFECTIONS (PCM-8207344); 24 MONTHS \$120,000

INDIANA UNIVERSITY, BLOOMINGTON

- HEGEMAN, GEORGE D; OXIDATION OF CARBON MONOXIDE BY BACTERIA (PCM-7812482 A01); 24 MONTHS \$50,000
- GEST, HOWARD; NITROGEN FIXATION, HYDROGEN METABOLISM, AND BIOENERGETIC REGULATION IN PHOTOSYNTHETIC BACTERIA (PCM-7910717 A02); 12 MONTHS \$95,000
- SCHWARTZ, DREW; THE REGULATION OF GENE ACTION IN MAIZE (PCM-7921230 A02); 12 MONTHS \$49,053
- CROUCH, MARTHA L; REGULATION OF EMBRYO-SPECIFIC STORAGE PROTEIN IN THE FLOWERING PLANT BRASSICA NAPUS (PCM-8003803 A01); 12 MONTHS \$50,035
- RAFF, ELIZABETH C; BIOCHEMICAL AND GENETIC REGULATION OF MORPHOGENESIS: THE CONTROL OF MICROTUBULE ASSEMBLY DURING SPERMATOGENESIS IN *DROSOPHILA* (PCM-8005701 A02); 12 MONTHS \$49,271
- MALACINSKI, GEORGE M; PRIMARY EMBRYONIC INDUCTION-ITS CELLULAR BASIS (PCM-8006343 A02); 12 MONTHS \$64,733
- PREER, JOHN R; STUDIES ON GENE ACTION IN *PARAMECIUM* (PCM-8022828 A01); \$8,000
- TOGASAKI, ROBERT K; MUTATIONAL ANALYSIS OF PHOTOSYNTHETIC CARBON METABOLISM IN *CHLAMYDOMONAS REINHARDTII* (PCM-8117958); 24 MONTHS \$67,500
- MAHLER, HENRY R, AND McDONOUGH, JAMES P; DYNAMICS OF YEAST PLASMA MEMBRANES (PCM-8204336); 12 MONTHS \$54,999

INDIANA UNIV-PURDUE UNIV AT INDIANAPOLIS

- OLSON, KENNETH R; VASCULAR PATHWAYS IN FISH GILLS AND THEIR FUNCTION IN RESPIRATION AND OSMOREGULATION (PCM-7923073 A02); 12 MONTHS \$25,000
- RAO, B D, AND KEMPLE, M D; MAGNETIC RESONANCE STUDIES OF BIOLUMINESCENT PROTEINS OF JELLYFISH (PCM-8022075 A01); 12 MONTHS \$45,000
- STEINRAUF, LARRY K; STRUCTURE-FUNCTION STUDIES OF MEMBRANE TRANSPORT (PCM-8207909); 12 MONTHS \$40,477

PURDUE UNIVERSITY-AGRICULTURAL EXPERIMENT STATION

- NICHOLSON, RALPH L, AND JUTLER, LARRY G; PHENOLIC METABOLISM AND DISEASE RESISTANCE IN CORN (PCM-8202837); 24 MONTHS \$96,000

PURDUE UNIVERSITY

- ROSSMANN, MICHAEL G; X-RAY DETERMINATION OF PROTEINS AND VIRUSES (PCM-7816584 A03); 12 MONTHS \$80,000

- CRANE, FREDERICK L; PHOTOSYNTHETIC ELECTRON TRANSPORT (PCM-7820458 A02); 12 MONTHS \$77,000
- BRACKER, CHARLES E; BIOCHEMISTRY AND CYTOLOGY OF MORPHOGENESIS IN *MUCOR* (PCM-7822832 A02); 12 MONTHS \$34,663
- ARONSON, ARTHUR I; STRUCTURE AND FUNCTION OF *BACILLUS THURINGIENSIS* (PCM-7907591 A02*); 12 MONTHS \$31,000
- DILLEY, RICHARD A; CHLOROPLAST MEMBRANE BIOCHEMISTRY (PCM-7923494 A01); 12 MONTHS \$73,000
- LARKINS, BRIAN A; ANALYSIS OF ZEIN GENE EXPRESSION DURING MAIZE ENDOSPERM DEVELOPMENT (PCM-8003757 A02); 12 MONTHS \$74,147
- ARGOS, PATRICK; ATOMIC STRUCTURE OF VIRUSES BY X-RAY DIFFRACTION (PCM-8004575 A02); 12 MONTHS \$45,000
- AXELROD, BERNARD; MECHANISM OF ACTION OF LIPID DIOXYGENASES (PCM-8011820 A02); 12 MONTHS \$44,000
- CRAMER, WILLIAM A; ELECTRON AND PROTON TRANSFER REACTIONS IN PHOTOSYNTHETIC ENERGY TRANSDUCTION (PCM-8022807 A01); 12 MONTHS \$65,200
- ARNOTT, STRUTHER; FIBER DIFFRACTION STUDIES (PCM-8102810 A01); 12 MONTHS \$57,600
- GELVIN, STANTON B; TRANSCRIPTION OF TI-PLASMIDS IN *AGROBACTERIUM* AND IN CROWN GALL TUMORS (PCM-8109626 A01); 12 MONTHS \$55,000
- LASKOWSKI, MICHAEL; SYNTHESIS OF PEPTIDE BONDS CATALYZED BY PROTEINASES (PCM-8111380 A01); 12 MONTHS \$46,000
- LOVETT, JAMES S; GENE EXPRESSION IN FUNGAL DEVELOPMENT (PCM-8111483 A01); 12 MONTHS \$50,000
- JAFFE, LIONEL F; CONTROL OF EARLY *DROSOPHILA* DEVELOPMENT BY STEADY IONIC CURRENTS (PCM-8202377); 12 MONTHS \$60,000
- KROGMANN, DAVID W; PHOTOSYNTHETIC PHOSPHORYLATION AND ELECTRON TRANSPORT (PCM-8203514); 12 MONTHS \$86,400
- CARPITA, NICHOLAS C; STRUCTURAL CHARACTERIZATION AND BIOSYNTHESIS OF GLUCURONARABINOXYLAN: A HEMICELLULOSIC CONSTITUENT IN GRAMINAE (PCM-8204221); 24 MONTHS \$64,000
- JOHNSON, JOHN E; STRUCTURAL STUDIES OF A MULTI COMPONENT RNA PLANT VIRUS (PCM-8207402); 12 MONTHS \$46,000
- ROSSMANN, MICHAEL G; X-RAY DETERMINATION OF PROTEINS AND VIRUSES (PCM-8207747); 12 MONTHS \$100,000
- GOLUB, EDWARD S; NORMAL T-CELL DIFFERENTIATION IN VITRO (PCM-8208365); 24 MONTHS \$140,000

IOWA

IOWA STATE UNIVERSITY OF SCIENCE & TECHNOLOGY

- NEVINS, DONALD J; MOLECULAR BASIS FOR CELL GROWTH IN PLANTS (PCM-7818588 A02); 12 MONTHS \$45,200
- ROBERTSON, DONALD S; GENETIC ANALYSIS OF A MUTATOR SYSTEM IN MAIZE (PCM-7923052 A02); 12 MONTHS \$55,000
- SHEIN, SHELDON S; REGULATION OF INTRACELLULAR PH IN THE EGG AND EARLY EMBRYO OF THE SEA URCHIN (PCM-8003733 A02); 12 MONTHS \$45,000
- COOLBAUGH, RONALD C; BIOSYNTHESIS OF GIBBERELLINS (PCM-8016237 A01); 12 MONTHS \$35,219
- BISHOP, STEPHEN H; CONTROL OF AMINO ACID LEVELS DURING CELL VOLUME REGULATION (PCM-8022806 A01); 12 MONTHS \$48,000
- FROMM, HERBERT J; STUDIES ON THE MECHANISM AND CONTROL OF ENZYME ACTION (PCM-8101999 A01); 12 MONTHS \$34,000
- PATTEE, PETER A; GENETICS OF BIOSYNTHESIS IN *STAPHYLOCOCCUS AUREUS* (PCM-8110058); 24 MONTHS \$90,000

UNIVERSITY OF IOWA

- CARLSON, WAYNE R; GENES CONTROLLING DISJUNCTION OF THE B CHROMOSOME IN CORN (PCM-7911083 A02); 12 MONTHS \$42,000
- WANG, WEI-YEH; MUTATIONAL ANALYSIS OF PROTOCHLOROPHYLLIDE REDUCTION (PCM-7923059 A01); \$3,100
- MILKMAN, ROGER D; GENETIC VARIATION IN *E. COLI*: NUCLEOTIDE SEQUENCES (PCM-8119435); 24 MONTHS \$100,000
- WANG, WEI-YEH; REGULATION OF DELTA-AMINOLEVULINIC ACID SYNTHESIS IN PLANT CELLS (PCM-8104721); 24 MONTHS \$78,000
- WILLIAMS, NORMAN E; BIOGENESIS OF CELL SURFACE MEMBRANE IN *TETRAHYMENA* (PCM-8207486); 12 MONTHS \$40,000
- DANIELS, LACY; PRODUCTION OF CHEMICALS AND FUELS FROM SYNTHESIS GAS USING BIOCATALYSIS (PCM-8207809*); 18 MONTHS \$58,869

KANSAS

KANSAS STATE UNIVERSITY

- WONG, PETER P; ELECTRON TRANSPORT TO RHIZOBIUM NITROGENASE AND NITRATE REDUCTASE (PCM-7904063 A02); 12 MONTHS \$43,000
- RODKEY, LEO S; AUTOREGULATION OF IMMUNE PROCESSES (PCM-7921110 A02); 12 MONTHS \$45,000
- HOPKINS, THEODORE L; REGULATION OF TYROSINE METABOLISM FOR INSECT CUTICLE TANNING (PCM-8003859 A01); 24 MONTHS \$100,000
- SHEPARD, JAMES F; FUSION, SELECTION AND REGENERATION OF MESOPHYLL PROTOPLASTS (PCM-8020713 A01); 12 MONTHS \$96,861
- CURRIER, THOMAS C; DEVELOPMENT OF GENETIC SYSTEMS IN THE PHYTOPATHOGENIC BACTERIUM, *PSEUDOMONAS SYRINGAE* (PCM-8021628 A01); 12 MONTHS \$40,000
- WILSON, FRED E; PHOTIC AND FEEDBACK REGULATION OF GONADOTROPIN SECRETION (PCM-8104027 A01); 12 MONTHS \$40,000
- DENELL, ROBIN E; GENETIC STUDIES OF A CHROMOSOMAL REGION OF UNIQUE DEVELOPMENTAL IMPACT IN *DROSOPHILA MELANOGASTER* (PCM-8104473 A01); 12 MONTHS \$55,000

UNIVERSITY OF KANSAS MAIN CAMPUS

FROST, SALLY K. THE REGULATION OF PIGMENTATION IN DEVELOPING AMPHIBIAN SKIN SYSTEMS (PCM-8022599 A01); \$7,442

AKAGI, JAMES M. METABOLISM OF SULFATE-REDUCING BACTERIA (PCM-8110080); 24 MONTHS \$89,986

AKAGI, JAMES M. METABOLISM OF SULFATE-REDUCING BACTERIA (PCM-8110080 A01); \$9,272

UNIVERSITY OF KANSAS MEDICAL CENTER

FISHER, HARVEY F. THE ENERGETICS OF ENZYME CATALYZED REACTIONS (PCM-8203880); 12 MONTHS \$50,000

KENTUCKY

BELLARMINE COLLEGE

KORN, ROBERT W. CELL ELONGATION PATTERNS (PCM-8110631); 24 MONTHS \$17,530

UNIVERSITY OF KENTUCKY

ROSENTHAL, GERALD A. CHEMISTRY OF NON-PROTEIN AMINO ACIDS (PCM-7820167 A02); 12 MONTHS \$52,000

BENHAM, CRAIG J. THEORETICAL ANALYSIS OF STRUCTURE AND TRANSITIONS IN SUPERHELICALLY STRESSED DNA (PCM-8002814 A01); 24 MONTHS \$42,000

BARKLEY, MARY D. ACQUISITION OF PULSED NANOSECOND FLUOREMETER SYSTEM (PCM-8115765); 12 MONTHS \$30,000

CHENIAE, GEORGE M. PHOTOSYNTHETIC O₂ EVOLUTION: IDENTIFICATION OF THE PROTEINS REQUIRED BY EXTRACTION/RECONSTITUTION ANALYSES AND BY USE OF SPECIFIC COVALENT PROBES. (PCM-8118287); 24 MONTHS \$70,000

UGLEM, GARY L. COMPARATIVE PHYSIOLOGY OF FLATWORMS (PCM-8203378); 12 MONTHS \$32,000

UNIVERSITY OF LOUISVILLE

DOYLE, RONALD J. AND STREIPS, ULDIS N. CELL WALL-DNA INTERACTIONS IN BACTERIA (PCM-8104099 A01); 12 MONTHS \$45,885

REHM, WARREN S. MECHANISMS OF ION TRANSPORT IN GASTRIC MUCOSA (PCM-8116828); 24 MONTHS \$148,000

WITTEBORT, RICHARD J. SOLID STATE NMR STUDIES OF MACROMOLECULAR DYNAMICS (PCM-8118912); 12 MONTHS \$44,000

LOUISIANA

LOUISIANA STATE UNIVERSITY, BATON ROUGE-AGRICULTURAL EXPERIMENT STATION

BARTLETT, SUE G. GENETIC AND MOLECULAR ANALYSIS OF THE CHLOROPLAST ATPASE COMPLEX IN CHLAMYDOMONAS REINHARDTII (PCM-8120199); 12 MONTHS \$22,450

LOUISIANA STATE UNIVERSITY, BATON ROUGE

DIETZ, THOMAS H. IONIC REGULATION IN THE FRESHWATER MUSSELS (PCM-7921089 A02); 12 MONTHS \$42,570

MEIER, ALBERT H. NEUROENDOCRINE CONTROL MECHANISMS FOR CIRCAANNUAL CYCLES (PCM-8114948); 12 MONTHS \$44,000

MATTICE, WAYNE L. LIPID-INDUCED CHANGES IN PEPTIDE HORMONES (PCM-8118197); 12 MONTHS \$45,000

CLINTON, GAIL M. PHOSPHORYLATION OF VESICULAR STOMATITIS VIRUS PROTEINS (PCM-8208155); 12 MONTHS \$38,000

TULANE UNIVERSITY-DELTA REGIONAL PRIMATE RESEARCH CENTER

LI, YU-TEH. THE GLYCOSIDASES INVOLVED IN THE DEGRADATION OF COMPLEX CARBOHYDRATES (PCM-7922466 A02); 12 MONTHS \$26,000

TULANE UNIVERSITY

TOMPKINS, ROBERT. MUTANTS AFFECTING AMPHIBIAN DEVELOPMENT (PCM-8209293); 24 MONTHS \$70,000

MAINE

JACKSON LABORATORY

BEDIGIAN, HENDRICK G. VIRAL ONCOGENESIS IN THE RABBIT (PCM-8005503 A02); 12 MONTHS \$49,105

EPFIG, JOHN J. RESPONSE OF THE OOCYTE-CUMULUS CELL COMPLEX TO HORMONES (PCM-8105414 A01); 12 MONTHS \$55,000

MOUNT DESERT ISLAND BIOLOGICAL LABORATORY

EPSTEIN, FRANKLIN H. MODELS FOR ACTIVE CHLORIDE TRANSPORT (PCM-7922665 A01); 12 MONTHS \$48,000

GOLDSTEIN, LEON. OPERATIONAL SUPPORT FOR THE MOUNT DESERT ISLAND BIOLOGICAL LABORATORY (DEB-8100823 A01*); 12 MONTHS \$22,500

UNIVERSITY OF MAINE, ORONO

SIDELL, BRUCE D. STRUCTURE/FUNCTION ADAPTATIONS TO ENVIRONMENTAL TEMPERATURE IN FISH SKELETAL MUSCLE (PCM-8104119 A01); 12 MONTHS \$43,000

TAVANTZIS, STELLOS M. ACQUISITION OF A TWO-COMPONENT SYSTEM CONSISTING OF A LIQUID SCINTILLATION COUNTER AND A SPECTROPHOTOMETER (PCM-8115740); 12 MONTHS \$25,000

MARYLAND

AMERICAN PHYSIOLOGICAL SOCIETY

REYNOLDS, ORR E. SYMPOSIUM ON TEMPERATURE EFFECTS ON FISH; SAN DIEGO, CA; WEEK OF OCTOBER 10, 1982 (PCM-8304100); 6 MONTHS \$3,500

AMERICAN SOCIETY OF BIOLOGICAL CHEMISTS

MEISTER, ALTON, AND HANCOCK, CHARLES C. GROUP TRAVEL FOR U.S. PARTICIPANTS IN THE TWELFTH INTERNATIONAL CONGRESS OF

BIOCHEMISTRY; PERTH, AUSTRALIA AUGUST 15-21, 1982 (PCM-8117157); 6 MONTHS \$15,000

FEDERATION OF AMER SOCIETIES FOR EXPER BIOLOGY

NISONOFF, ALFRED. CONFERENCE ON MONONUCLEAR CELL AND ANTIBODY NETWORKS; VERMONT ACADEMY; SAXTONS RIVER, VT; JULY 5-9, 1982 (PCM-8203144); 6 MONTHS \$3,500

DAVIDSON, RICHARD L. FASEB CONFERENCE ON SOMATIC CELL GENETICS; JULY 12-16, 1982; SAXTONS RIVER, VT (PCM-8203408); 12 MONTHS \$2,000

JOHNS HOPKINS UNIVERSITY

ACKERS, GARY K. PHYSICO-CHEMICAL STUDIES ON THE ASSEMBLY OF THE HISTONE OCTAMER (PCM-8014533 A01); 12 MONTHS \$31,500

ACKERS, GARY K. STUDIES ON THE LINKAGE BETWEEN OXYGENATION AND SUBUNIT DISSOCIATION IN HUMAN HEMOGLOBIN (PCM-8023321 A01); 12 MONTHS \$59,400

MAIER, ROBERT J. ACQUISITION OF A SPECTROPHOTOMETER FOR THE IDENTIFICATION OF ELECTRON TRANSPORT FACTORS INVOLVED IN H₂ OXIDATION IN RHIZOBIUM JAPONICUM (PCM-8104136); 12 MONTHS \$17,730

SCANGOS, GEORGE A. GENETIC TRANSFORMATION OF MAMMALIAN CELLS BY MICROINJECTION OF DNA (PCM-8105296 A01); 12 MONTHS \$60,000

GAFFNEY, BETTY J. CHEMICAL AND BIOPHYSICAL STUDIES OF SINDBIS VIRUS GLYCOPROTEIN SPIKES (PCM-8109863 A01); 12 MONTHS \$52,200

HUNT, RICHARD K. DEVELOPMENT OF NERVE-CELL SPECIFICITY: CLONAL AND RETINOTECTAL PATTERNS (PCM-8120571); 12 MONTHS \$58,000

MILDVAN, ALBERT S. MECHANISMS OF METAL ACTIVATED AND METALLOENZYMES (PCM-8121355); 4 MONTHS \$47,700

TS'O, PAUL O. SYMPOSIUM: NEW DEVELOPMENTS IN THE PHYSICAL APPROACH TO BIOLOGICAL STRUCTURE AND FUNCTION; BALTIMORE, MD; JUNE 1-2, 1982 (PCM-8200573); 12 MONTHS \$3,000

SHEARN, ALLEN, AND CHENEY, CLARISSA M. ANALYSIS OF AN A-TUBULIN MUTATION WHICH CAUSES DEVELOPMENTAL ABNORMALITIES IN DROSOPHILA (PCM-8204860); 24 MONTHS \$90,000

JOHNS HOPKINS UNIVERSITY-SCHOOL OF HYGIENE & PUBLIC HEALTH

GROSSMAN, LAWRENCE. ENZYMATIC REPAIR OF DNA: COMPARATIVE STUDIES (PCM-7914191 A02); 12 MONTHS \$45,000

TS'O, PAUL O. NUCLEAR MAGNETIC RESONANCE STUDIES ON THE CONFORMATION AND INTERACTION OF NUCLEIC ACIDS (PCM-8023320 A01); 12 MONTHS \$54,000

HUANG, P. C. GENETIC STUDY OF METALLOTHIONEIN: SEQUENCE ANALYSIS OF ITS GENES (PCM-8104369 A01); 12 MONTHS \$55,000

SCHUETZ, ALLEN W. AND DUBIN, NORMAN H. ENDOCRINE AND PHYSIOLOGICAL FUNCTIONS OF CUMULUS CELL-OOCYTE DIFFERENTIATION IN MAMMALS (PCM-8202818); 24 MONTHS \$120,000

JOHNS HOPKINS UNIVERSITY-SCHOOL OF MEDICINE

PEDERSEN, PETER L. PHOSPHATE TRANSPORT PROCESSES OF ANIMAL CELLS (PCM-7813249 A04); 12 MONTHS \$55,426

MAYER, MANFRED M. IMMUNOLOGICAL AND CHEMICAL STUDIES OF THE COMPLEMENT SYSTEM (PCM-8012315 A01); 12 MONTHS \$60,000

MAYER, MANFRED M. IMMUNOLOGICAL AND CHEMICAL STUDIES OF THE COMPLEMENT SYSTEM (PCM-8012315 A02); 12 MONTHS \$64,000

TSONG, TIAN Y. PROTEIN CONFORMATIONAL DYNAMICS AND FUNCTIONS (PCM-8109630 A01); 12 MONTHS \$41,400

LATTMAN, EATON E. AND GODFREY, JAMIE E. CRYSTALLOGRAPHIC STUDY OF HISTONE H3-H4 TETRAMER (PCM-8109755); 12 MONTHS \$67,000

POLLARD, THOMAS D. ACQUISITION OF RAPID FREEZING AND FREEZE-FRACTURE EQUIPMENT (PCM-8115762); 12 MONTHS \$66,000

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MARTIN MARIETTA CORPORATION-MARTIN MARIETTA LABORATORY

VELTHUYS, BRUNO R. PROTON TRANSLOCATION AND THE CYTOCHROME B6-F COMPLEX (PCM-8117034); 12 MONTHS \$29,714

NATIONAL INSTITUTES OF HEALTH

CARRICO, CHRISTINE. NUCLEIC ACID SEQUENCE DATA BANK (PCM-8240822); 26 MONTHS \$100,000

SOIL & LAND USE TECHNOLOGY INC

MANN, FRED L. FEASIBILITY OF INTRODUCING NEW CROPS-PHASE II (PCM-7821346 A02); \$763

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BLAUSTEIN, MORDECAI P. SODIUM AND CALCIUM TRANSPORT IN BARNACLE MUSCLE FIBERS AND SQUID AXONS (PCM-7911704 A02); 12 MONTHS \$53,929

SUDIN, RAYMOND A. SEPARATION AND INVESTIGATION OF INDIVIDUAL CALCIUM BUFFERING ENTITIES IN GIANT AXONS (PCM-8022820 A01); 12 MONTHS \$59,724

ROSEN, BARRY P. ACTIVE EFFLUX OF CATIONS IN ESCHERICHIA COLI (PCM-8115769); 12 MONTHS \$97,182

LAKOWICZ, JOSEPH R. SEGMENTAL MOBILITY OF BIOPOLYMERS (PCM-8130068); 12 MONTHS \$45,663

UNIVERSITY OF MARYLAND, BALTIMORE COUNTY

BURCHARD, ROBERT P. STUDIES OF THE MECHANISM(S) OF BACTERIAL GLIDING MOTILITY (PCM-8011150 A01; 12 MONTHS \$40,000)
 WU, MADELINE. THE REPLICATION AND DEVELOPMENT OF CHLOROPLAST DNA IN CHLAMYDOMONAS REINHARDI (PCM-8110118 A01; 12 MONTHS \$46,950)

GETTMANN, RICHARD C. GENETIC CONTROL OF THE MEIOTIC PROCESS (PCM-8112769; 24 MONTHS \$100,000)

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COOKE, TODD J. THE CONTROL OF MORPHOGENETIC PHENOMENA IN FERN GAMETOPHYTES (PCM-8104085 A01; 12 MONTHS \$40,000)

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PAULUS, HENRY. REGULATION OF AMINO ACID BIOSYNTHESIS (PCM-7911707 A02; 12 MONTHS \$35,000)

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HARRISON, STEPHEN C. AND WILEY, DON C.; *ASSEMBLY OF VIRUSES AND RELATED SUBCELLULAR STRUCTURES* (PCM-8202821); 12 MONTHS \$75,000

MANIATIS, THOMAS P.; *MECHANISMS OF DIFFERENTIAL GLOBIN GENE EXPRESSION* (PCM-8203768); 12 MONTHS \$125,227

KAFATOS, FOTIS C.; *INTERNATIONAL WORKSHOP ON MOLECULAR BIOLOGY AND DEVELOPMENTAL GENETICS OF DROSOPHILA MELANO-GASTER*, JUNE 20-26, 1982, KOLYMBARI, CRETE, GREECE (PCM-8206604); 12 MONTHS \$3,000

KAFATOS, FOTIS C.; *11ST SYMPOSIUM OF THE SOCIETY FOR DEVELOPMENTAL BIOLOGY*, JUNE 17-19, 1982, CAMBRIDGE, MA (PCM-8207102)*; 6 MONTHS \$7,300

HARVARD UNIVERSITY-HERBARIUM

GOLDSTEIN, RICHARD N.; *REGULATION AND CAPSID SIZE DETERMINATION BY SATELLITE PHAGE P4* (PCM-8006276 A02); 12 MONTHS \$55,000

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SHIMOMURA, OSAMU; *BIOCHEMISTRY OF LUMINESCENCE* (PCM-8201005); 12 MONTHS \$93,000

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GROSS, PAUL R.; *IMPROVING MARINE RESOURCES FACILITIES AT THE MBL* (DEB-8209469)*; 24 MONTHS \$30,000

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PENMAN, SHELDON; *FORM AND MOTILITY OF CYTOPLASMIC MATRICES* (PCM-8004696 A01); 12 MONTHS \$59,872

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BROWN, GENE M.; *BIOSYNTHESIS OF B VITAMINS AND RELATED COMPOUNDS* (PCM-8104543); 24 MONTHS \$142,000

MAGASANIK, BORIS; *REGULATION OF THE METABOLIC PROCESSES OF THE SINGLE CELL AT THE MOLECULAR LEVEL* (PCM-8104544 A01); 12 MONTHS \$85,000

LURIA, SALVADOR E.; *BIOCHEMICAL ACTIONS OF COLICINS* (PCM-8108866 A01); 12 MONTHS \$95,000

KHORANA, H. GOBIND; *CHEMICAL AND BIOLOGICAL STUDIES OF MEMBRANES* (PCM-8110992); 12 MONTHS \$100,000

CHEN, SOW-HSIN; *SCATTERING TECHNIQUES APPLIED TO SUPRAMOLECULAR STRUCTURES AND CELL MOTIONS* (PCM-8111534 A01); 12 MONTHS \$46,800

SHARP, PHILLIP A.; *GENE EXPRESSION IN MAMMALIAN CELLS* (PCM-8200309); 12 MONTHS \$83,122

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NORTHEASTERN UNIVERSITY

RUDY, PAUL P.; *IMPROVEMENT OF GENERAL FACILITIES AT MARINE SCIENCE INSTITUTE, NAHANT* (BSR-8209171)*; 12 MONTHS \$20,000

ROBERT B BRIGHAM HOSPITAL

LIU, DAVID Y.; *GLYCOPOLIDS: MACROPHAGE RECEPTORS FOR MIGRATION INHIBITORY FACTOR (MIF)* (PCM-8208262); 12 MONTHS \$54,379

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GOLDBERG, EDWARD B.; *RESTRICTION ENZYME ACTIVITY IN VITRO AND IN VIVO* (PCM-7910514 A02); 12 MONTHS \$46,000

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PAPAIOANNOU, VIRGINIA E.; *MUTANT AND NEOPLASTIC CELLS IN MAMMALIAN EMBRYOGENESIS* (PCM-8114950); 24 MONTHS \$55,000

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JACOBSON, ALLAN S.; *DNA MEDIATED TRANSFORMATION OF DICTYOSTELIUM DISCOIDEUM* (PCM-8118805); 24 MONTHS \$100,000

MOLE, JOHN E.; *ACQUISITION OF AN AMINO ACID ANALYZER* (PCM-8200616); 12 MONTHS \$50,000

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WALSH, JOHN V. AND SINGER, JOSHUA J.; *ELECTRICAL AND PHARMACOLOGICAL PROPERTIES OF FRESHLY ISOLATED SINGLE SMOOTH MUSCLE CELLS* (PCM-8208015); 12 MONTHS \$75,000

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FULLER, R. C.; *THE ASSEMBLY OF A UNIQUE PHOTOCHEMICAL ENERGY TRANSDUCING SYSTEM* (PCM-7915326 A02); 12 MONTHS \$54,000

BURGREN, WARREN W.; *ONTOGENY OF AERIAL GAS EXCHANGE IN BIMODAL BREATHERS* (PCM-8003752 A02); 12 MONTHS \$26,850

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KUNKEL, JOSEPH G. AND NORDIN, JOHN H.; *ROLE OF OLIGOSACCHARIDE STRUCTURE IN VITELLOGENESIS* (PCM-8204549); 12 MONTHS \$54,000

NORDIN, JOHN H.; *STRUCTURE, BIOSYNTHESIS AND PATHOGENICITY OF FUNGAL CELL WALL POLYSACCHARIDES* (PCM-8208121); 12 MONTHS \$38,000

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WEAVER, NEVIN; *ACQUISITION OF A GAS-LIQUID CHROMATOGRAPH* (PCM-8112767); 12 MONTHS \$14,955

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ALLEN, MARY M.; *THE METABOLISM OF NITROGEN STORAGE PROTEINS IN NON-NITROGEN FIXING CYANOBACTERIA* (PCM-8004529 A02); 12 MONTHS \$35,008

WORCESTER FOUNDATION FOR EXPERIMENTAL BIOLOGY

GUT, MARCEL; *SYNTHESES OF BILE ACIDS* (PCM-7819594 A02); 12 MONTHS \$46,000

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CHLADEK, STANISLAV; *SOLUBLE FACTORS IN PROTEIN BIOSYNTHESIS* (PCM-8207539); 12 MONTHS \$38,000

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ZEEVAART, JAN D.; *SYNTHESIS, METABOLISM AND LOCATION OF ABSICISIC ACID IN RELATION TO WATER STRESS IN PLANTS* (PCM-7807653 A03); 12 MONTHS \$32,412

BANDURSKI, ROBERT S.; *METABOLISM OF MICROORGANISMS AND HIGHER PLANTS* (PCM-7904637 A02); 12 MONTHS \$101,448

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TOLBERT, NATHAN E.; *LEAF PEROXISOMES AND PHOTORESPIRATION* (PCM-8005917 A01); 12 MONTHS \$75,375

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BREZNAK, JOHN A.; *BIOCHEMICAL BASES FOR SYMBIOSIS BETWEEN INTESTINAL ORGANISMS AND THEIR HOST* (PCM-8012026 A02); 12 MONTHS \$54,441

- KUNG, HSING-JIE: THE MOLECULAR BASIS OF RETROVIRUS INDUCED AVIAN LYMPHOID LEUKOSIS (PCM-8021839 A01); 12 MONTHS \$60,000
- DAZZO, FRANK B: BIOCHEMISTRY OF LECTIN RECEPTORS IN THE RHIZOBIUM-CLOVER SYMBIOSIS (PCM-8021906 A01); 12 MONTHS \$59,090
- ARNTZEN, CHARLES J: STRUCTURAL ORGANIZATION OF CHLOROPLAST MEMBRANES (PCM-8023031 A01); 12 MONTHS \$67,500
- KENDE, HANS: REGULATION OF PLANT GROWTH BY ETHYLENE (PCM-8109764 A01); 12 MONTHS \$41,292
- SPIELMAN, WILLIAM S: METABOLIC CONTROL OF RENAL HEMODYNAMICS (PCM-8110588); 24 MONTHS \$115,641
- ROBBINS, LEONARD G: MATERNAL-ZYGOTIC LETHAL INTERACTIONS IN *DROSOPHILA* (PCM-8202662*); 24 MONTHS \$100,000
- VOLK, COLEMAN P: SURROGATE GENETICS OF ANABAENA (PCM-820-665); 24 MONTHS \$100,000
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- PIEPER, DAVID R: GNRH SECRETION AND PINEAL GLAND INDUCED GONADAL REGRESSION (PCM-8121327); 12 MONTHS \$40,000
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- COON, MINOR J: MECHANISM OF OXYGEN ACTIVATION (PCM-8102324); 24 MONTHS \$160,000
- GREENBERG, G R: MEMBRANE PROTEINS IN DEOXYRIBONUCLEOTIDE SYNTHESIS (PCM-8119177); 12 MONTHS \$45,000
- NEIDHARDT, FREDERICK C. AND HELLING, ROBERT B: IDENTIFICATION AND MAPPING OF *ESCHERICHIA COLI* PROTEINS (PCM-8207190); 12 MONTHS \$25,000
- UNIVERSITY OF MICHIGAN-ANN ARBOR**
- PHILLIPS, GEORGE D: DIFFUSION OF MACROMOLECULES UNDER NON-CLASSICAL CONDITIONS (CHE-7920389 A02*); 12 MONTHS \$15,500
- KRIMM, SAMUEL: SPECTROSCOPY OF BIOLOGICAL MACROMOLECULES (PCM-7921652 A02); 12 MONTHS \$49,500
- WEBB, PAUL W: PRINCIPLES OF PREDATION IN TELEOST FISHES (PCM-8006469 A02); 12 MONTHS \$29,500
- MALVIN, RICHARD L: CONTROL OF RENAL HORMONES (PCM-8019709 A01); 12 MONTHS \$50,300
- BORER, KATARINA T: ACCELERATION OF GROWTH BY EXERCISE AND NUTRITION (PCM-8104375 A01); 12 MONTHS \$51,078
- GROSSMAN, LAWRENCE I: MOLECULAR EVOLUTION OF CYTOCHROME C OXIDASE IN PRIMATES (PCM-8118915); 12 MONTHS \$60,000
- KRIMM, SAMUEL, LUDWIG, MARTHA I. AND NORDMAN, CHRISTER E: ACQUISITION OF COMPUTER GRAPHICS FOR VIBRATIONAL AND DIFFRACTION STUDIES OF BIOMACROMOLECULES (PCM-8200270*); 12 MONTHS \$100,000
- MARTIN, MICHAEL M: BIOCHEMICAL IMPLICATIONS OF INSECT MYCOPHAGY AND BACTERIOPHAGY (PCM-8203557); 12 MONTHS \$65,000
- WAYNE STATE UNIVERSITY-SCHOOL OF MEDICINE**
- RIGHTHAND, VERA F: VIRAL AND CELLULAR PROTEINS: FUNCTION IN INFECTION (PCM-8201957); 12 MONTHS \$40,000
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- IZAWA, SEIKICHI: BIOENERGETICS OF PHOTOSYNTHESIS (PCM-7922576 A02); 12 MONTHS \$69,778
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- PETTY, HOWARD R: FLUORESCENCE AND ELECTRON SPIN RESONANCE STUDIES OF PHAGOCYTIC CELL FUNCTION (PCM-8207838); 12 MONTHS \$49,967
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- UNIVERSITY OF MINNESOTA-AGRICULTURAL EXPERIMENT STATION**
- GENGENBACH, BURLE G, GREEN, CHARLES E, PHILLIPS, RONALD L. AND RUBENSTEIN, IRWIN: DEVELOPMENTAL AND MOLECULAR BIOLOGY OF MAIZE (PCM-7912069 A03); 12 MONTHS \$100,000
- GANDER, JOHN E: METABOLISM AND FUNCTION OF NUCLEOSIDE DIPHOSPHATE SUGARS (PCM-8109628); 24 MONTHS \$91,950
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- BRYANT, ROBERT G: INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH PROJECT: NMR DISPERSION EQUIPMENT AND APPLICATIONS (PCM-8106054*); 12 MONTHS \$25,000
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- MUNCK, ECKARD: MOSSBAUER SPECTROSCOPY ON NITROGENASE COMPONENTS (PCM-8005610 A02); 12 MONTHS \$67,500
- HOOPER, ALAN B: BIOCHEMISTRY OF NITRIFICATION IN NITROSO-MONAS: HYDROXYLAMINE OXIDOREDUCTASE (PCM-8008710 A02); 12 MONTHS \$62,000
- SHIER, WAYNE T: ACTIVATABLE CELLULAR PHOSPHOLIPASE A2 (PCM-8011784 A02); 12 MONTHS \$55,000
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- FUCHS, JAMES: METABOLISM OF DNA (PCM-8109637 A01); 12 MONTHS \$55,000
- JOHNSON, ROSS G: ACQUISITION OF AN ELECTRON MICROSCOPE (PCM-8115936); 12 MONTHS \$100,000
- BILCOMFIELD, VICTOR A: HYDRODYNAMICS OF COMPLEX BIOLOGICAL MACROMOLECULES (PCM-8118107); 12 MONTHS \$64,000
- LE TOURNEAU, PAUL C: MORPHOGENETIC CELL BEHAVIOR DURING NEURODEVELOPMENT (PCM-8203855); 24 MONTHS \$78,000
- LEFEBVRE, PAUL A: REGULATION OF GENE EXPRESSION DURING REGENERATION OF *CHLAMYDOMONAS FLAGELLA* (PCM-8208167); 12 MONTHS \$45,000
- GUILFOYLE, THOMAS J: AUXIN REGULATED GENE EXPRESSION (PCM-8208496); 12 MONTHS \$60,000
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- ANDERSON, PAUL M: UREA CYCLE AND OSMOREGULATION IN ELASMOBRANCHS (PCM-7824130 A01); 24 MONTHS \$106,000
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- NELSTUEN, GARY L: ALTERNATIVES TO PROTEINS AND NUCLEIC ACIDS (PCM-8002362 A02); 12 MONTHS \$28,000
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- MISSISSIPPI STATE UNIVERSITY**
- SCHULTZ, TOR P: NITROBENZENE OXIDATION OF LIGNIN MODEL COMPOUNDS: KINETIC AND MECHANISTIC STUDIES (PCM-8207345); 24 MONTHS \$48,983
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- DRAKE, HAROLD L: NICKEL, A BIOLOGICALLY ACTIVE TRACE METAL (PCM-8111639); 12 MONTHS \$41,000
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- SRIDHARA, S: STUDIES ON INSECT RNA POLYMERASES (PCM-7903276 A02); 12 MONTHS \$40,000
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- ARABO, BARBARA A: MECHANISMS OF SUPPRESSION IN GENETICALLY CONTROLLED IMMUNE RESPONSES (PCM-8021809 A01); 12 MONTHS \$57,469
- AUNE, THOMAS M. AND PIERCE, CARL W: STRUCTURE AND MECHANISM OF ACTION OF THE LYMPHOKINE, SOLUBLE IMMUNE RESPONSE SUPPRESSOR (SIRS) (PCM-8119606); 12 MONTHS \$80,000
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- CHINNADURAL, G: INTEGRATION AND EXPRESSION OF HUMAN REPLICATED DNA ELEMENT (PCM-8202933); 24 MONTHS \$83,398
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- WALL, JUDY D: GENETICS AND REGULATION OF NITROGEN FIXATION IN *RHODOSPIRILLUM RUBRUM* (PCM-7904223 A02); 12 MONTHS \$53,541
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- NEUFFER, M G: GENETIC AND EMBRYO CULTURE STUDIES OF DEFECTIVE MAIZE KERNEL MUTANTS (PCM-8005709 A03*); 12 MONTHS \$45,000
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- WONG, TUCK C: ACQUISITION OF A 300 MHZ NMR SPECTROMETER (PCM-8115599); 12 MONTHS \$130,000
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MILES, DONALD R; NUCLEAR GENES REGULATING PHOTOSYNTHESIS AND CHLOROPLAST PROTEINS IN CORN (PCM-8208910); 24 MONTHS \$55,732

MCINTOSH, MARK A; IRON-MEDIATED REGULATION OF GENE EXPRESSION (PCM-8210415); 24 MONTHS \$90,000

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SCHMITZ, KENNETH S; ELECTROPHORETIC LIGHT SCATTERING: APPLIED STATIC AND SINUSOIDAL FIELDS (PCM-8118478); 12 MONTHS \$64,000

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MATHEWS, F S; CRYSTALLOGRAPHIC STUDIES OF B-TYPE CYTOCHROME ELECTRON TRANSPORT SYSTEMS (PCM-7922708 A02); 12 MONTHS \$40,500

GLASER, LUIS; EMBRYONAL CELL SURFACE RECOGNITION (PCM-8011473 A02); 12 MONTHS \$50,000

SCHLESSINGER, DAVID; E. COLI PRE-RRNA PROCESSING AND TRANSCRIPTION-TRANSLATION COUPLING (PCM-8017402 A01); 12 MONTHS \$48,000

BANASZAK, LEONARD J; ACQUISITION OF X-RAY DATA COLLECTION EQUIPMENT (PCM-8115735); 12 MONTHS \$90,000

WASHINGTON UNIVERSITY

SILVER, SIMON D; BACTERIAL CATION AND ANION TRANSPORT SYSTEMS (PCM-7903986 A02); 12 MONTHS \$67,556

COLBURN, THERESE M, AND THACH, ROBERT E; MESSENGER-RNA DISCRIMINATION IN AN IN VITRO PROTEIN SYNTHESIZING SYSTEM (PCM-7911936 A02); 12 MONTHS \$45,000

BANASZAK, LEONARD J; STRUCTURE-FUNCTION STUDIES OF DEHYDROGENASES (PCM-7921864 A02); 12 MONTHS \$52,000

GOODENOUGH, URSULA W; UNSTABLE GENETIC ELEMENTS IN CHLAMYDOMONAS (PCM-8008716 A01); 12 MONTHS \$37,190

VARNER, JOSEPH E; CONTROL OF THE SYNTHESIS OF HYDROXYPROLINE-RICH CELL WALL PROTEIN IN PLANTS (PCM-8104516 A01); 12 MONTHS \$43,386

BEACHY, ROGER N; DEVELOPMENTAL REGULATION OF GENES ENCODING SOYBEAN 7S STORAGE PROTEIN (CONGLYCININ) (PCM-8203122); 12 MONTHS \$56,000

DAVIE, JOSEPH M; PAUCICLONAL IMMUNITY: MODELS FOR DIVERSIFICATION (PCM-8208399); 12 MONTHS \$85,000

MONTANA

MONTANA STATE UNIVERSITY

JACKSON, LARRY L; BIOCHEMISTRY OF MATING PHEROMONES OF THE FRUIT FLY (PCM-8208393); 12 MONTHS \$28,800

NEBRASKA

UNIVERSITY OF NEBRASKA AT LINCOLN

KNOCH, HERMAN W; CHEMICAL NATURE OF HOST-SPECIFIC PATHOTOXINS PRODUCED BY PLANT PATHOGENS (PCM-7920685 A02); 12 MONTHS \$31,000

PARKHURST, LAWRENCE J; NEW HYBRID HEMOGLOBINS: FUNCTIONAL ASPECTS OF SUBUNIT INTERACTIONS (PCM-8003655 A02); 12 MONTHS \$52,200

SCHUSTER, SHELDON M; STRUCTURE AND CONTROL OF HEART ATP SYNTHETASE (PCM-8021553 A01); 12 MONTHS \$47,000

SCHWARTZBACH, STEVEN; REGULATION OF ORGANELLE BIOGENESIS (PCM-8202472); 24 MONTHS \$95,865

SPITSBERG, VITALY L; PLANT MITOCHONDRIAL F1-ATPASE AND EVOLUTION OF THE ATP SYNTHESIZING COMPLEX (PCM-8212700); 24 MONTHS \$60,000

UNIVERSITY OF NEBRASKA MEDICAL CENTER AT OMAHA

CAMPBELL, GARY T; PHYSIOLOGY OF THE PREPUBERTAL PERIOD IN THE RAT (PCM-7903252 A02); 12 MONTHS \$58,000

SCHNEIDER, E GAYLE; CELL-CELL RECOGNITION AND ADHESION DURING EMBRYOGENESIS (PCM-8118503); 24 MONTHS \$60,000

NEVADA

UNIVERSITY OF NEVADA, RENO

WINICOV, ILGA B; HETEROGENEOUS NUCLEAR RNA PROCESSING (PCM-7922207 A02); 12 MONTHS \$35,000

BLOMQUIST, GARY J; INSECT SEX PHEROMONES: BIOSYNTHESIS AND ENDOCRINE REGULATION (PCM-8118305); 24 MONTHS \$124,730

NEW HAMPSHIRE

DARTMOUTH COLLEGE

JACKSON, WILLIAM T; HAEMANTHUS SPINDLE STRUCTURE AND FUNCTION (PCM-8002357 A02); 12 MONTHS \$45,000

SPIEGEL, MELVIN; IN VIVO STUDIES OF CELL ADHESION AND GAS-TRULATION (PCM-8021631 A01); 12 MONTHS \$50,000

SLOBODA, ROGER D; MICROTUBULE DIRECTIONALITY IN THE MITOTIC APPARATUS (PCM-8021976 A01); 12 MONTHS \$49,913

SPIEGEL, EVELYN; ALTERNATIVE PATHWAYS OF DEVELOPMENT IN REAGGREGATING SEA URCHIN EMBRYOS (PCM-8112690); 24 MONTHS \$80,000

DARTMOUTH COLLEGE-DARTMOUTH MEDICAL SCHOOL

JACOBS, NICHOLAS J; MECHANISM AND REGULATION OF MICROBIAL PROTOPORPHYRIN GEN OXIDATION (PCM-7919530 A02); 12 MONTHS \$33,850

LUBIN, MARTIN; MONOVALENT CATIONS, CELL MEMBRANES, AND CELL GROWTH (PCM-8022048 A01); 12 MONTHS \$50,000

UNIVERSITY OF NEW HAMPSHIRE, DURHAM

BLAKEMORE, RICHARD P; MAGNETISM IN BACTERIA (PCM-7922224 A02); 12 MONTHS \$25,000

WALKER, CHARLES W; MECHANISMS GOVERNING CELLULAR PROLIFERATION AND MEIOSIS DURING SPERMATOGENESIS (PCM-8003670 A01); 24 MONTHS \$80,000

TILLINGHAST, EDWARD K; THE GLANDULAR ORIGIN OF CRB WEB POTASSIUM, PHOSPHATE AND AMINES AND THEIR SITES OF TRANSPORT IN GARDEN SPIDERS (PCM-8202807); 24 MONTHS \$84,902

NEW JERSEY

COLLEGE OF MEDICINE & DENTISTRY OF NEW JERSEY

ROTHSTEIN, RODNEY J; MECHANISMS OF GENOMIC REARRANGEMENTS IN YEAST (PCM-8003865 A02); 12 MONTHS \$65,000

CHRISTAKOS, SYLVIA; KIDNEY AND VITAMIN D REGULATED CALCIUM HOMEOSTASIS (PCM-8103421 A01); 12 MONTHS \$47,000

PENNINGROTH, STEPHEN M; ENERGY COUPLING AND ITS CONTROL IN CYTOPLASMIC MOTILITY (PCM-8120483); 12 MONTHS \$46,640

MORRIS, N R; GENETICS AND BIOCHEMISTRY OF MITOSIS IN ASPERGILLUS (PCM-8202690); 24 MONTHS \$80,000

COLLEGE OF MEDICINE & DENTISTRY OF NEW JERSEY-RUTGERS MEDICAL SCHOOL

GHOSH, BILAN K; BIOMASS UTILIZATION: INCREASED YIELDS OF CELLULASE BY THE ENHANCEMENT OF SECRETION (PCM-8108663*); 24 MONTHS \$74,807

SILVER, FREDERICK H, AND TRELSTAD, ROBERT L; COLLAGEN FIBRILLOGENESIS AND DEVELOPMENT OF MATRIX MECHANICAL PROPERTIES (PCM-8119191); 12 MONTHS \$57,000

FAIRLEIGH DICKINSON UNIVERSITY-TEANECK CAMPUS

LESK, ARTHUR M; THE STRUCTURE, FUNCTION AND EVOLUTION OF PROTEINS: STRUCTURAL AND THERMODYNAMIC ANALYSIS (PCM-8012007 A02); 12 MONTHS \$26,705

PRINCETON UNIVERSITY

FRESCO, JACQUES R; PHYSICAL BIOCHEMISTRY OF NUCLEIC ACID: ROLE OF NON-STANDARD BASE PAIRS (PCM-8023706 A01); 12 MONTHS \$67,500

COX, EDWARD C; ACQUISITION OF IMAGE ANALYSIS EQUIPMENT (PCM-8115662); 12 MONTHS \$60,000

DRESSLER, DAVID; ISOLATION AND CHARACTERIZATION OF DNA SYNAPTASE (PCM-8200542*); 12 MONTHS \$83,200

BONNER, JOHN T; CHEMOTAXIS AND DIFFERENTIATION IN SLIME MOLDS (PCM-8202442); 12 MONTHS \$55,000

RUTGERS UNIVERSITY-COOK COLLEGE

KAHN, PETER C; THE VOLUMETRIC PROPERTIES OF FOLDED GLOBULAR PROTEINS (PCM-8012349 A01); 12 MONTHS \$37,000

WARD, WILLIAM W; ENERGY TRANSFER IN COELENTERATE BIOLUMINESCENCE (PCM-8208827); 24 MONTHS \$65,000

RUTGERS UNIVERSITY-DOUGLASS COLLEGE

ESSIEN, FRANCINE B; PRENATAL EXPRESSION OF ALTERED GLUCOSE METABOLISM IN THE MOUSE (PCM-8202914); 24 MONTHS \$114,494

RUTGERS UNIVERSITY

MAC KAY, VIVIAN L; HORMONE RESPONSE IN YEAST (PCM-8110083 A01); \$35,000

LAMPEN, J OLIVER; MODIFIED PENICILLINASES AND ENZYME SECRETION BY BACILLI (PCM-8116888); 12 MONTHS \$50,000

ST JOHN, ANN C; DEGRADATION OF INTRACELLULAR PROTEINS IN ESCHERICHIA COLI (PCM-8204809); 24 MONTHS \$88,000

NEW MEXICO

NEW MEXICO STATE UNIVERSITY

BERNSTEIN, MARVIN H; RESPIRATION, CIRCULATION, AND THERMAL REGULATION DURING AVIAN FLIGHT (PCM-8118956); 12 MONTHS \$63,402

UNIVERSITY OF NEW MEXICO-SCHOOL OF MEDICINE

SOLOMON, SIDNEY; FUNCTIONAL DEVELOPMENT OF THE KIDNEY (PCM-7815383 A03); 12 MONTHS \$58,600

BUSS, WILLIAM C; STUDIES ON THE MECHANISM OF THE GLUCOCORTICOID INDUCED DECREASE IN THE ACTIVITY OF RAT THYMIC RNA POLYMERASE II (PCM-8003442 A02); 12 MONTHS \$40,000

UNIVERSITY OF NEW MEXICO

BACA, OSWALD G; INTERACTION OF INTRACELLULAR PARASITES WITH MACROPHAGE-LIKE TUMOR CELL LINES (PCM-8010633 A02); 12 MONTHS \$54,700

NEW YORK

BOYCE THOMPSON INST FOR PLANT RESEARCH INC

SZALAY, ALADAR A; CLONING NIF GENES WITH SYNTHETIC DNA PROBES (PCM-7830252 A03); \$67,936

BROOKHAVEN NATIONAL LABORATORY

KOETZLE, THOMAS F; THE PROTEIN DATA BANK (PCM-8013028 A01); 12 MONTHS \$70,000

KOETZLE, THOMAS F; THE PROTEIN DATA BANK (PCM-8013028 A02); \$10,000

- SCHOENBORN, BENNO P. NEUTRON SCATTERING ANALYSIS OF BIOLOGICAL STRUCTURES (PCM-8017259 A01); 12 MONTHS \$175,850
- SCHOENBORN, BENNO P. DEVELOPMENT OF MULTILAYER MONOCHROMATORS AND POLARIZERS FOR NEUTRON AND X-RAY SCATTERING (PCM-8017261 A01); 12 MONTHS \$70,000
- CHILDRENS HOSPITAL OF BUFFALO
- LEBENTHAL, EMANUEL; CONTROL AND DEVELOPMENT OF ENTEROKINASE (PCM-8021817 A01); 12 MONTHS \$51,304
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- CALLENDER, ROBERT H. RESONANCE RAMAN STUDIES OF BIOLOGICAL CHROMOPHORES (PCM-8202840*); 12 MONTHS \$64,000
- CITY UNIVERSITY OF NEW YORK SYSTEM OFFICE
- COHEN, WILLIAM D. STUDIES ON MARGINAL BAND FORMATION AND ERYTHROCYTE MORPHOGENESIS (PCM-8107195 A02); 12 MONTHS \$50,000
- COLD SPRING HARBOR LAB OF QUANTITATIVE BIOLOGY
- ROBERTS, RICHARD J. RESTRICTION ENDONUCLEASES (PCM-7919882 A02*); 12 MONTHS \$70,000
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- ROBERTS, RICHARD J. SEARCH FOR NEW RESTRICTION ENDONUCLEASES (PCM-8011709 A02*); 12 MONTHS \$17,300
- HICKS, JAMES B. PLANT MOLECULAR BIOLOGY WORKSHOP, COLD SPRING HARBOR, NEW YORK, SUMMER 1982 (PCM-8104439 A01); 12 MONTHS \$29,800
- WATSON, JAMES D. A CONFERENCE ON HEAT SHOCK INDUCTION OF PROTEINS, TO BE HELD ON MAY 1982, COLD SPRING HARBOR, N.Y. (PCM-8112763*); 12 MONTHS \$7,000
- MATHEWS, MICHAEL B. RNA PROCESSING MEETINGS, MAY 19-23, 1982, COLD SPRING HARBOR, NEW YORK (PCM-8118936*); 12 MONTHS \$5,000
- WATSON, JAMES D. IN VITRO MUTAGENESIS MEETING, TO BE HELD ON MAY 12-16, 1982, COLD SPRING HARBOR LAB, N.Y. (PCM-8118983*); 12 MONTHS \$5,000
- WATSON, JAMES D. PHYCOMYCES MEETING 1982, COLD SPRING HARBOR, JULY 20-26, 1982 (PCM-8119100); 12 MONTHS \$2,000
- WATSON, JAMES D. SEVENTH HERPES VIRUS WORKSHOP, TO BE HELD ON AUGUST 31 SEPTEMBER 5, 1982, COLD SPRING HARBOR, N.Y. (PCM-8119170*); 12 MONTHS \$4,000
- HARSHEY, RASIKA M. DNA INTERMEDIATES IN BACTERIOPHAGE MU TRANSPOSITION (PCM-8119756); 12 MONTHS \$55,000
- HEFFRON, FRED L. MOLECULAR MECHANISM OF TRANSPOSITION (PCM-8110063 A01); 12 MONTHS \$65,000
- BROKER, THOMAS R. INTERNATIONAL CONFERENCE ON PAPILLOMA VIRUSES, SEPT 15-19, 1982, COLD SPRING HARBOR, N.Y. (PCM-8202504*); 6 MONTHS \$3,000
- TAMANOI, FUYUHIKO, AND STILLMAN, BRUCE W. PROTEIN-DEOXYNUCLEOTIDE COMPLEXES AND CELL DNA REPLICATION (PCM-8202912); 12 MONTHS \$43,000
- SO, MAGDALENE. REGULATION OF EXPRESSION OF NEISSERIA GONORRHOEA SURFACE PROTEINS (PCM-8203174); 12 MONTHS \$70,000
- HICKS, JAMES B. MALMBERG, RUSSELL L. STRATHERN, JEFFREY N. AND KLAR, AMAR J. GENETIC TRANSFORMATION AND MUTANT SELECTION IN PLANTS (PCM-8203213*); 12 MONTHS \$65,000
- BUKHARI, AHMAD I. THE LIFE CYCLE OF BACTERIOPHAGE MU: TRANSMID AS A VECTOR FOR GENETIC MANIPULATION OF BACTERIA (PCM-8203749); 12 MONTHS \$60,000
- WATSON, JAMES D. 47TH SYMPOSIUM - 'STRUCTURES OF DNA', SUMMER 1982, COLD SPRING HARBOR, NEW YORK (PCM-8212070*); 12 MONTHS \$5,000
- COLLEGE OF ENVIRONMENTAL SCIENCE AND FORESTRY
- SARKO, ANATOLE. CONFORMATIONAL ANALYSIS OF POLYSACCHARIDES (CHEMISTRY) (CHE-8107534 A01*); 12 MONTHS \$15,000
- SILVERSTEIN, ROBERT M. PHEROMONES OF SEVERAL TREE-PEST INSECTS (PCM-8120636); 12 MONTHS \$52,000
- COLUMBIA UNIVERSITY-COLLEGE OF PHYSICIANS AND SURGEONS
- GOODMAN, REBA M. GENETIC CONTROL MECHANISMS IN SALIVARY CHROMOSOMES (PCM-7912347 A02); \$12,721
- SAWYER, WILBUR H. EVOLUTION OF NEUROHYPOPHYSIAL FUNCTIONS AMONG VERTEBRATES (PCM-8004076 A02); 12 MONTHS \$56,900
- KABAT, ELVIN A. IMMUNOCHEMICAL STUDIES ON POLYSACCHARIDES (PCM-8102321 A01); 12 MONTHS \$1,97,000
- ROBERTS, JAMES L. AND EVING-ER, MARIAN J. REGULATION OF GNRH (LHRH) BIOSYNTHESIS AND GENE EXPRESSION (PCM-8203210); 12 MONTHS \$70,000
- HONIG, BARRY H. THEORETICAL STUDIES OF BIOLOGICAL CHROMOPHORES (PCM-8207145); 12 MONTHS \$88,250
- AXEL, RICHARD; ALAN T. WATERMAN AWARD (PCM-8213709); 36 MONTHS \$150,000
- COLUMBIA UNIVERSITY
- VOGEL, RUTH R. AND VOGEL, HENRY J. COMPARATIVE MICROBIAL BIOSYNTHESIS (PCM-7612311 A02); 6 MONTHS \$12,000
- BENESCH, REINHOLD; ALLOSTERIC EFFECTS AND SELF-ASSEMBLY IN NATIVE AND CHEMICALLY MODIFIED HEMOGLOBINS (PCM-7911610 A02); 12 MONTHS \$45,900
- MILLS, DONALD R. MECHANISM OF ENZYME SYNTHESIS (PCM-7921109 A02); 12 MONTHS \$55,000
- BEYCHOK, SHERMAN. PROTEIN FOLDING AND ASSEMBLY IN RELATION TO CELL FUNCTION (PCM-8005614 A02); 12 MONTHS \$63,000
- CANTOR, CHARLES R. NUCLEOPROTEIN PACKAGING IN VIRUSES AND CHROMATIN (PCM-8006354 A02); 12 MONTHS \$45,000
- MAYLIE-PFENNING, MARIE F. PLASMALEMMAL GLYCOCONJUGATES IN PREIMPLANTATION DEVELOPMENT (PCM-8012023 A02); 12 MONTHS \$55,000
- TANNENBAUM, JANET. EFFECTS OF PERTURBING AGENTS ON CYTOSKELETAL COMPOSITION AND METABOLISM (PCM-8014072 A02); 12 MONTHS \$45,000
- KAWAI, MASATAKA. CROSS-BRIDGE KINETICS IN SKELETAL MUSCLE (PCM-8014527 A02); \$10,643
- KAWAI, MASATAKA. CROSS-BRIDGE KINETICS IN SKELETAL MUSCLE (PCM-8014527 A03); 12 MONTHS \$45,000
- WALLACE, BONNIE A. CRYSTALLINE MEMBRANE PROTEINS AND LIPIDS (PCM-8020063 A01); 12 MONTHS \$54,000
- ZUBAY, GEOFFREY L. EXTRA TRANSCRIPTIONAL MODES OF REGULATION OF GENE EXPRESSION IN PROKARYOTES (PCM-8021625 A01); 12 MONTHS \$52,000
- CHANG, HAI WON; HETEROGENEOUS MOLECULAR FORMS OF ACETYLCHOLINESTERASE FROM TORPEDO CALIFORNICA: DIFFERENCES IN STRUCTURE AND FUNCTION (PCM-8022832 A01); 12 MONTHS \$25,000
- MAKOWSKI, LEE. STRUCTURE OF LIGHT HARVESTING PROTEINS (PCM-8104323 A01); 12 MONTHS \$50,400
- HENDERSON, ANN S. THE RELATIONSHIP OF CHROMOSOME STRUCTURE AND BEHAVIOR TO CHROMOSOME ABERRATION (PCM-8104359 A01); 12 MONTHS \$40,000
- TZAGOLOFF, ALEXANDER A. EXPRESSION OF TRANSFER RNA AND RIBOSOMAL RNA GENES OF MITOCHONDRIA (PCM-8116680); 12 MONTHS \$73,765
- DEN, HALINA. GLYCOCONJUGATES OF DEVELOPING MUSCLE (PCM-8208375); 24 MONTHS \$107,000
- EFSTRATIADIS, ARGIRIS. THE MOLECULAR STRUCTURE AND TRANSCRIPTION OF MAMMALIAN GLOBIN GENES (PCM-8218014); 9 MONTHS \$38,798
- CORNELL UNIVERSITY
- MC CARTY, RICHARD E. FUNCTION OF COUPLING FACTOR 1 IN PHOTOPHOSPHORYLATION BY CHLOROPLASTS (PCM-7911476 A02); 12 MONTHS \$67,000
- SCHERAGA, HAROLD A. STRUCTURAL STUDIES OF PROTEINS (PCM-7920279 A02); 12 MONTHS \$66,600
- GREENBERG, E. P. MECHANISMS OF MOTILITY AND MOTILE BEHAVIOR OF SPIROCHETES (PCM-7924800 A01); \$4,162
- CALVO, JOSEPH M. REGULATORY AND EVOLUTIONARY RELATIONSHIPS BETWEEN IIIVH1 AND LEUABCD GENE CLUSTERS (PCM-8002480 A02); 12 MONTHS \$26,000
- RACKER, EPHRAIM. RESOLUTION AND RECONSTITUTION OF THE SYSTEM OF PHOTOPHOSPHORYLATION (PCM-8021201 A01); 12 MONTHS \$45,000
- STEPONKUS, PETER L. EFFECTS OF FREEZING AND COLD ACCLIMATION ON THE PLASMA MEMBRANE OF ISOLATED CEREAL CROP PROTOPLASTS (PCM-8021688 A01); 12 MONTHS \$32,996
- ZAITLIN, MILTON. PLANT VIRUS REPLICATION (PCM-8104150 A01); 12 MONTHS \$35,000
- REIMERS, THOMAS J. ENDOCRINE INTERACTIONS OF BOVINE TROPHOBLAST CELLS (PCM-8107187); 24 MONTHS \$100,000
- DIETERT, RODNEY R. HEMATOPOIETIC DEVELOPMENT AND DIFFERENTIATION (PCM-8109810 A01); 12 MONTHS \$44,428
- HESS, GEORGE P. STRUCTURE AND FUNCTION OF REGULATORY PROTEINS (PCM-8112226); 24 MONTHS \$60,000
- GIBSON, JANE. MEMBRANE FUNCTION AND DIVERSITY IN CYANOBACTERIA (PCM-8112490); 12 MONTHS \$42,600
- MORSE, ROGER A. AND WILKINSON, CHRISTOPH F. PESTICIDE-PROOFING HONEY BEES THROUGH ENZYME INDUCTION (PCM-8119757); 12 MONTHS \$55,000
- ZÄHLER, STANLEY A. GENETIC STUDIES WITH BACILLUS SUBTILIS BACTERIOPHAGE SPB (PCM-8120780); 24 MONTHS \$120,000
- HAMMES, GORDON G. AN INVESTIGATION OF MULTIENZYME COMPLEXES (PCM-8120818); 12 MONTHS \$68,000
- HEPPEL, LEON A. BINDING PROTEINS AND THEIR ROLE IN ACTIVE TRANSPORT (PCM-8121029); 12 MONTHS \$55,000
- EDELSTEIN, STUART J. QUATERNARY INTERACTIONS IN PROTEINS (PCM-8207155); 12 MONTHS \$79,754
- CORNELL UNIVERSITY-CORNELL UNIVERSITY MEDICAL CENTER
- MEISTER, ALTON. STUDIES ON BIOCHEMICAL MECHANISMS (PCM-8105684); 24 MONTHS \$84,500
- NOVOGRODSKY, ABRAHAM, AND STENZEL, KURT H. LYMPHOCYTE ACTIVATION BY THE MITOGENIC OXIDIZING AGENTS (PCM-8208939); 12 MONTHS \$75,000
- CORNELL UNIVERSITY-CORNELL UNIVERSITY - ENDOWED
- USHER, DAVID A. SEQUENCE SPECIFIC MODIFICATION OF NUCLEIC ACIDS (PCM-7806651 A03); 3 MONTHS \$5,000
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- AIST, J. R. AND ISRAEL, H. W. CELL WALL APPPOSITIONS AND PLANT DISEASE RESISTANCE (PCM-8110822 A01); 12 MONTHS \$30,000
- SPANSWICK, ROGER M. BIOPHYSICAL STUDIES ON ION TRANSPORT IN PLANTS (PCM-8111007); 12 MONTHS \$87,000
- CLAYTON, RODERICK K. PHOTOSYNTHETIC ENERGY CONVERSION (PCM-8202898); 12 MONTHS \$40,000

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ROELOFS, WENDELL L. PHEROMONE BIOSYNTHESIS IN THE LEAFROLLER MOTH, AN INSECT PEST (PCM-8109850 A01; \$12,771)
 ROELOFS, WENDELL L. PHEROMONE BIOSYNTHESIS IN THE LEAFROLLER MOTH, AN INSECT PEST (PCM-8109850 A02; 12 MONTHS \$54,999)

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NEW YORK ACADEMY OF SCIENCES

MCGHEE, JERRY R. CONFERENCE ON THE SECRETORY IMMUNE SYSTEM, MAY 4-7, 1982, NEW YORK, N.Y. (PCM-8117303; 12 MONTHS \$5,000)

BONA, CONSTANTIN N. CONFERENCE ON IMMUNE NETWORKS, NEW YORK CITY, NOVEMBER 29 DECEMBER 1, 1982 (PCM-8208174; 12 MONTHS \$5,000)

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DUKE UNIVERSITY

HARRIS, ELIZABETH H. BOYNTON, JOHN E. AND GILLHAM, NICHOLAS W. A CENTER FOR THE MENDELIAN GENETICS OF CHLAMYDOMONAS REINHARDTII (PCM-7823308 A02); 12 MONTHS \$37,814

NIJHOUT, H F. CONTROL OF ENDOCRINE SECRETION IN HEMIPTERA (PCM-7911779 A02); 12 MONTHS \$23,205

KRAMER, PAUL J. CAUSES OF CHILLING INJURY IN PLANTS (PCM-7917334 A02); 12 MONTHS \$59,393

KRAMER, PAUL J. CAUSES OF CHILLING INJURY IN PLANTS (PCM-7917334 A03); \$2,210

TANFORD, CHARLES. STRUCTURE AND FUNCTION OF CELL MEMBRANES (PCM-7920676 A02); 12 MONTHS \$27,000

WEBSTER, ROBERT E. MEMBRANE ASSOCIATED PROTEIN STRUCTURES (PCM-7924122 A02); 12 MONTHS \$50,000

BLUM, JACOB J. CONTROL OF DYNEIN ATPASE ACTIVITY AND OF CILIARY MOTILITY (PCM-8112259); 12 MONTHS \$30,000

DUKE UNIVERSITY-MARINE LABORATORY

COSTLOW, JOHN D. SUPPORT OF FIELD RESEARCH FACILITIES AT DUKE UNIVERSITY MARINE LABORATORY (DEB-8209422); 12 MONTHS \$40,000

DUKE UNIVERSITY-SCHOOL OF MEDICINE

KAMIN, HENRY, AND SIEGEL, LEWIS M. MECHANISM OF FERREDOXIN-UTILIZING ASSIMILATORY ENZYMES IN PLANTS (PCM-7924877 A01); 12 MONTHS \$83,000

MOSES, MONTROSE J. CYTOGENETIC ANALYSIS WITH THE SYNAPTONEMAL COMPLEX (PCM-8005547 A02); 12 MONTHS \$51,339

ENDOW, SHARYN A. GENETIC MECHANISMS AFFECTING GENE COPY NUMBER AND DIVERSITY IN HIGHER ORGANISMS (PCM-8110183 A01); \$35,000

ROBERTSON, J D. ACQUISITION OF A CRYOFRACT 250 (PCM-8115764); 12 MONTHS \$87,000

MANDEL, LAZARO J. AND LIEBERMAN, MELVYN. ACQUISITION OF INSTRUMENTATION FOR ANALYTICAL ELECTRON MICROSCOPY (PCM-8115951); 12 MONTHS \$175,000

NORTH CAROLINA STATE UNIVERSITY AT RALEIGH

LEVINGS, C S. MITOCHONDRIAL DNA OF MAIZE: ITS ORGANIZATION AND GENETIC DIVERSITY (PCM-8010933 A01); 12 MONTHS \$75,000

SPIKER, STEVEN. THE ROLE OF PROTEINS IN CHROMATIN STRUCTURE (PCM-8105135); 12 MONTHS \$32,488

DAVIS, ROBERT F. ACQUISITION OF AN ION MICROSCOPE (DMR-8107499 A01); 12 MONTHS \$45,000

UNDERWOOD, HERBERT A. PHYSIOLOGY OF CIRCADIAN AND PERIODIC SYSTEMS (PCM-8116880); 12 MONTHS \$37,014

JACKSON, WILLIAM A. AND VOLK, RICHARD J. REDUCTION AND TRANSLOCATION OF EXOGENOUS AND ENDOGENOUS NITRATE BY ROOT SYSTEMS: RELATIONSHIP TO NITRATE INFLUX AND EFFLUX (PCM-8118661); 24 MONTHS \$87,360

WORK, ROBERT W. THE PHYSICO-CHEMICAL PROPERTIES OF CERTAIN POLYPEPTIDE (SPIDER) FIBERS AND THEIR ENGINEERING IMPLICATIONS (PCM-8119075); 12 MONTHS \$20,000

BENTLEY, PETER J. MECHANISM OF OSMOREGULATION IN AMPHIBIA: RELATIONSHIPS TO CALCIUM METABOLISM (PCM-8216314); 12 MONTHS \$65,600

UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL-SCHOOL OF MEDICINE

JONES, MARY E. BIOSYNTHETIC AND TRANSFER REACTIONS (PCM-7902623 A03); 12 MONTHS \$79,247

UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL

WOLFENDEN, RICHARD V. HYDROPHILIC CHARACTER OF BIOLOGICAL COMPOUNDS (PCM-7823016 A02); 12 MONTHS \$40,000

HACKENBROCK, CHARLES R. CATALYTIC EVENTS IN THE MITOCHONDRIAL ENERGY TRANSDUCING MEMBRANE (PCM-7910968 A02); 12 MONTHS \$70,000

LENTZ, BARRY R. COMPOSITION: STRUCTURE RELATIONSHIPS IN LIPID DISPERSIONS (PCM-7922738 A02); 12 MONTHS \$32,400

TALMAGE, ROY V. THE PHYSIOLOGICAL FUNCTION OF CALCITONIN IN MAMMALS: A UNIQUE CALCIUM STORAGE COMPARTMENT IN BONE (PCM-8007288 A02); 12 MONTHS \$55,000

GILBERT, LAWRENCE I. NEUROPEPTIDE CONTROL OF ECDYSONE BIOSYNTHESIS (PCM-8116831); 24 MONTHS \$120,000

STUMPF, WALTER E. SITES OF VITAMIN D ACTION (PCM-8200569); 24 MONTHS \$119,885

MANESS, PATRICIA F. THE MOLECULAR BASIS OF VIRAL ONCOGENESIS (PCM-8203857); 12 MONTHS \$45,000

WAKE FOREST UNIVERSITY-BOWMAN GRAY SCHOOL OF MEDICINE

KILPATRICK, BILL A. ANALYSIS OF HUMAN CYTOMEGALOVIRUS MESSENGER RNA (PCM-8021716 A01); 12 MONTHS \$46,247

WAKE FOREST UNIVERSITY

KUHN, RAYMOND E. ROLE OF SUB-POPULATIONS OF MACROPHAGES IN CHAGAS' DISEASE (PCM-8203179); 12 MONTHS \$65,000

NORTH DAKOTA

NORTH DAKOTA STATE UNIVERSITY MAIN CAMPUS

SAWICKI, CHARLES A. NANOSECOND LASER PHOTOLYSIS INVESTIGATION OF THE MECHANISM OF THE AFFINITY CHANGE OF HEMOGLOBIN SEEN IN COOPERATIVE LIGAND BINDING (PCM-8206920; 12 MONTHS \$67,000)

UNIVERSITY OF NORTH DAKOTA MAIN CAMPUS

SHERIDAN, WILLIAM F. NUTRITIONALLY DEFECTIVE MAIZE KERNEL MUTANTS (PCM-8004814 A02; 12 MONTHS \$55,000)

OHIO

BATTELLE MEMORIAL INSTITUTE

KIMBALL, PAUL C. A MULTISTAGE MOLECULAR MODEL FOR N₂O PLASTIC TRANSFORMATION IN RATS (PCM-8208274; 12 MONTHS \$44,310)

BOWLING GREEN STATE UNIVERSITY

FIORAVANTI, CARMEN F. ACQUISITION OF A HIGH PRESSURE LIQUID CHROMATOGRAPHY UNIT FOR PHYSIOLOGY RESEARCH (PCM-8200373; 12 MONTHS \$25,000)

CASE WESTERN RESERVE UNIVERSITY

ROSENBERY, TERRONE L. STRUCTURE OF THE COLLAGEN-LIKE SUBUNITS OF ACETYLCHOLINESTERASE (PCM-8007061 A02; 12 MONTHS \$47,000)

WOOD, HARLAND G. ROLE OF INORGANIC PYROPHOSPHATE AND INORGANIC POLYPHOSPHATE IN METABOLISM (PCM-8022701 A01; 12 MONTHS \$50,000)

ZUJ, JAMES E. ACQUISITION OF HIGH PERFORMANCE LIQUID CHROMATOGRAPHY FOR BIOLOGICAL RESEARCH (PCM-8115938; 12 MONTHS \$25,000)

SABLE, HENRY Z. INTERACTION OF ENZYMES, COENZYMES, SUBSTRATES AND METAL IONS (PCM-8119643; 12 MONTHS \$27,000)

TOWN, C. D. EXPRESSION OF ALTERNATE PHENOTYPES DURING DEVELOPMENT (PCM-8209762; 12 MONTHS \$70,000)

CHARLES F. KETTERING FOUNDATION-CHARLES F. KETTERING RESEARCH LABORATORY

KEISTER, DONALD L. ROLE OF OXYGEN AND GLUTAMINE SYNTHESIS IN NITROGEN FIXATION AND AMMONIA ASSIMILATION IN RHIZOBIUM (PCM-7906672 A01; 10 MONTHS \$25,000)

BAUER, WOLFGANG D. THE ROLE OF LECTINS IN PLANT-MICROORGANISM INTERACTIONS (PCM-7922947 A02; 12 MONTHS \$70,000)

KE, BACON. PRIMARY PHOTOCHEMICAL AND ELECTRON-TRANSPORT REACTIONS IN PHOTOSYNTHESIS (PCM-8003702 A02; 12 MONTHS \$61,200)

NEWTON, WILLIAM E. IRON-MOLYBDENUM COFACTOR AND ITS COMPLEMENTARY PROTEIN FROM NITROGENASE (PCM-8110335; 12 MONTHS \$70,000)

PETERS, GERALD A. AND CALVERT, HARRY E. SPORULATION IN AZOLLA NARAYANA SYMBIOSIS: THE PROCESS AND ITS CONTROL (PCM-8208458; 12 MONTHS \$141,989)

KENT STATE UNIVERSITY

WALZ, FREDERICK G. LIVER ENDOPLASMIC RETICULUM POLYPEPTIDES (PCM-8107924 A01; 12 MONTHS \$50,000)

KENYON COLLEGE

EDWARDS, KATHRYN L. REGULATION OF DIFFERENTIAL GROWTH IN ROOT GRAVITROPISM: CORRELATION WITH ENDOGENOUS HORMONE DISTRIBUTION, POLAR TRANSPORT, AND THE EFFECTS OF NPA, H, AND K (PCM-8207147; 24 MONTHS \$50,000)

MEDICAL COLLEGE OF OHIO AT TOLEDO

NELSON, LEONARD. A MEANS OF REGULATING FLAGELLAR MOVEMENT IN SPERM (PCM-8002358 A02; 12 MONTHS \$48,125)

BLUMENTHAL, ROBERT M. REGULATION AND BIOCHEMISTRY OF RESTRICTION ENDONUCLEASES (PCM-8201953; 24 MONTHS \$75,000)

OHIO STATE UNIVERSITY

SERIF, GEORGE S. FUCOSE SYNTHESIS AND UTILIZATION IN MAMMALIAN TISSUE (PCM-7911032 A02; 12 MONTHS \$24,000)

REEVE, JOHN N. DEVELOPMENT AND EXPRESSION OF BACTERIAL VIRUSES IN ANUCLATE CELLS (PCM-7912019 A02; 12 MONTHS \$58,000)

PAPPAS, PETER W. CHARACTERIZATION OF TEGUMENTARY MEMBRANE-BOUND ENZYMES OF GASTROINTESTINAL PARASITES (PCM-8009442 A02; 12 MONTHS \$35,000)

BYERS, THOMAS J. EEA, A DIFFERENTIATION ENHANCING FACTOR IN ACANTHAMOEBA: CHARACTERIZATION, SYNTHESIS, AND FATE (PCM-8011696 A02; 12 MONTHS \$29,911)

MARZLUF, GEORGE A. MOLECULAR STUDIES OF GENETIC REGULATION IN NEUROSPORA (PCM-8013042 A01; 12 MONTHS \$55,000)

RAGHAVAN, VALAYAMGH. ACQUISITION OF A ZEISS VIDEOPLAN-IMAGE ANALYSIS SYSTEM (PCM-8112223; 12 MONTHS \$14,000)

TSAL, MING-DAW. STEREOCHEMISTRY OF ENZYME REACTIONS INVOLVING A PROPROCHIRAL PHOSPHORUS CENTER (PCM-8140443 A01; 12 MONTHS \$31,500)

IVES, DAVID H. MECHANISMS OF NUCLEOSIDE KINASE REGULATION (PCM-8203003; 24 MONTHS \$90,000)

OHIO UNIVERSITY

SMITH, IVAN K. COMPARTMENTATION OF SULFUR METABOLISM IN PLANTS (PCM-8104535; 24 MONTHS \$49,725)

BRASELTON, JAMES P. KARYOTYPIC ANALYSIS OF MEMBERS OF THE PLASMODIOPHORAE PATHOGENIC ON CROP PLANTS (PCM-8113631 A01; \$16,873)

UNIVERSITY OF CINCINNATI-COLLEGE OF MEDICINE

STAMMBOCK, PETER J. CENTROMERES AND CHROMOSOMES (PCM-8115195; 12 MONTHS \$37,345)

LARSEN, WILLIAM. GRANULOSA GAP JUNCTION CHANGES IN THE REPRODUCTIVE CYCLE (PCM-8117927 A01; 12 MONTHS \$50,725)

UNIVERSITY OF CINCINNATI

KANESHIRO, EDNA S. THE ROLE OF INOSITOL LIPID METABOLISM IN THE EXCITABLE MEMBRANE OF PARAMECIUM (PCM-8020505 A01; 12 MONTHS \$43,615)

ELDER, RICHARD C. DEVELOPMENT OF EXAFS AS A BIOCHEMICAL RESEARCH TOOL (PCM-8023743 A01; 12 MONTHS \$41,600)

RUDNEY, HARRY. REGULATION OF UBIQUINONE AND POLYISOPRENOID BIOSYNTHESIS (PCM-8204817; 12 MONTHS \$66,198)

UNIVERSITY OF DAYTON

GEIGER, DONALD R. CONTROL OF EXPORT AND DISPOSITION OF PRODUCTS OF PHOTOSYNTHESIS IN RESPONSE TO SOURCE AND SINK STATUS (PCM-8008720 A01; 12 MONTHS \$49,380)

OKLAHOMA

OKLAHOMA MEDICAL RESEARCH FOUNDATION

DAY, NOORBIBI K. PHYLOGENETIC DEVELOPMENT OF THE COMPLEMENT SYSTEM (PCM-8216557; 24 MONTHS \$58,210)

OKLAHOMA STATE UNIVERSITY-AGRICULTURAL EXPERIMENT STATION

WALLER, GEORGE R. ENZYMES INVOLVED IN CAFFEINE (ALKALOID) METABOLISM IN COFFEA SPECIES (PCM-7823160 A02; 12 MONTHS \$41,800)

OKLAHOMA STATE UNIVERSITY

SAUER, JOHN R. PHYSIOLOGY OF SALT AND WATER BALANCE IN ACARINE SPECIES (PCM-7921715 A02; 12 MONTHS \$32,200)

SCOTT, HUGH L. THEORETICAL STUDIES OF LIPID INTERACTIONS AND INTERFACES IN BIOMEMBRANES (PCM-8010954 A01; 24 MONTHS \$50,000)

ESSENBERG, MARGARET K. AND RICHARDSON, PAUL E. ROLE OF INHIBITORS FROM IMMUNE COTTON LEAVES IN BACTERIAL BLIGHT RESISTANCE (PCM-8117015; 24 MONTHS \$75,000)

GHOLSON, ROBERT K. ENZYMATIC STUDIES OF DE NOVO PYRIDINE NUCLEOTIDE SYNTHESIS IN E. COLI AND HIGHER PLANTS (PCM-8117138; 12 MONTHS \$55,094)

UNIVERSITY OF OKLAHOMA NORMAN CAMPUS

BEEVERS, LEONARD. PROTEIN GLYCOSYLATION AND INTRACELLULAR TARGETING OF VACUOLAR PROTEINS (PCM-8204537; 24 MONTHS \$80,000)

RUSSELL, SCOTT D. INVESTIGATIONS INTO SPERM-SPECIFICITY AND TRANSMISSION OF MALE CYTOPLASMIC ORGANELLES DURING EARLY EMBRYOGENESIS IN THE ANGIOSPERM PLUMBAGO ZEYLANICA (PCM-8208466; 24 MONTHS \$70,000)

OREGON

OREGON GRADUATE CENTER

GOLD, MICHAEL H. LIGNIN DEGRADATION BY PHANEROCHAETE CHRYSOSPORIUM: A BIOCHEMICAL GENETIC APPROACH (PCM-8114218 A01; 12 MONTHS \$82,409)

OREGON STATE UNIVERSITY-AGRICULTURAL EXPERIMENT STATION

EVANS, HAROLD J. LIMITATIONS OF NITROGEN FIXATION IN THE LEGUME RHIZOBIUM SYMBIOSIS (PCM-8118148; 12 MONTHS \$90,051)

OREGON STATE UNIVERSITY

BAISTED, DEREK J. METABOLISM OF STARCH LIPIDS DURING DEVELOPMENT AND GERMINATION OF CEREAL GRAINS (PCM-7818054 A01; 4 MONTHS \$2,392)

PARKS, LEO W. FUNCTION OF STEROLS IN THE METABOLISM OF SACCAROMYCES CEREVISIAE (PCM-7827609 A02; 12 MONTHS \$41,000)

BISHOP, NORMAN I. MUTATION ANALYSIS OF PARTIAL REACTIONS OF PHOTOSYNTHESIS (PCM-7910771 A02; 12 MONTHS \$62,200)

RYKER, LEE C. AND LIBBEY, LEONARD M. CHEMOACOUSTIC STIMULI AND RESPONSES IN BARK BEETLES ON CONIFERS (PCM-7921708 A04; 12 MONTHS \$39,700)

JOHNSON, W. C. CIRCULAR DICHROISM AND THE CONFORMATION OF BIOLOGICAL POLYMERS (PCM-8021210 A01; 12 MONTHS \$60,300)

SCHIMMERLIK, MICHAEL I. ACQUISITION OF A LIQUID SCINTILLATION COUNTER (PCM-8109688; 12 MONTHS \$25,000)

SCHAUP, H. W. RIBOSOME ASSEMBLY AND FUNCTION (PCM-8208463; 12 MONTHS \$35,000)

REED COLLEGE

STAFFORD, HELEN A. THE METABOLISM AND REGULATION OF PRO-CYANIDIN ACCUMULATION IN HIGHER PLANTS (PCM-7920915 A02; 12 MONTHS \$52,213)

UNIVERSITY OF OREGON HEALTH SCIENCES CENTER

KABAT, DAVID. MOLECULAR GENETICS OF A PLASMA MEMBRANE GLYCOPROTEIN: MULV GP70 (PCM-7919372 A01; 12 MONTHS \$45,880)

UNIVERSITY OF OREGON - EUGENE

CAPALDI, RODERICK A. ELECTRON MICROSCOPY AND IMAGE RECONSTRUCTION STUDIES OF BOVINE HEART CYTOCHROME C OXIDASE (PCM-7826258 A01; \$4,663)

CAPALDI, RODERICK A. ELECTRON MICROSCOPY AND IMAGE RECONSTRUCTION STUDIES OF BOVINE HEART CYTOCHROME C OXIDASE (PCM-7826258 A02; 24 MONTHS \$98,000)

- MATTHEWS, BRIAN W; *STRUCTURE AND STABILITY OF THERMOLYSIN AND OTHER PROTEINS* (PCM-8014311 A02); 12 MONTHS \$72,900
- BERNHARD, SIDNEY A; *STRUCTURE AND FUNCTION OF CATALYTIC SITES IN ENZYMES* (PCM-8016249 A02); 12 MONTHS \$55,000
- PETICOLAS, WARNER L; *PROTEIN AND ENZYME DYNAMICS FROM LASER RAMAN SCATTERING* (PCM-8021197 A01); 12 MONTHS \$45,500
- HARRIS, PATRICIA J; *THE CYTOSKELETON AND CELL CYCLE CONTROLS* (PCM-8102884 A01); 12 MONTHS \$46,319
- SCHILLMAN, JOHN A; *SPECTROSCOPY OF ORIENTED BIOLOGICAL SYSTEMS* (PCM-8104339 A01); 12 MONTHS \$72,000
- STAHL, FRANKLIN W; *GROWTH, MUTATION, AND RECOMBINATION IN BACTERIOPHAGE* (PCM-8109799 A01); 12 MONTHS \$90,000
- VON HIPPEL, PETER H; *ACQUISITION OF A SPECTROFLUORIMETER* (PCM-8115739); 12 MONTHS \$40,000
- TERWILLIGER, ROBERT C; *STRUCTURE AND FUNCTION OF INVERTEBRATE RESPIRATORY PROTEINS* (PCM-8207548); 12 MONTHS \$36,000

PENNSYLVANIA

CARNEGIE-MELLON UNIVERSITY

- JARVIK, JONATHAN W; *GENE CONTROL OF FLAGELLAR ASSEMBLY IN CHLAMYDOMONAS* (PCM-8119165); 12 MONTHS \$50,000
- TAYLOR, D LANSING; *PHAGOCYTOSIS: A MOLECULAR CYTOCHEMICAL APPROACH* (PCM-8119187); 24 MONTHS \$69,998
- MCCLURE, W R; *MECHANISM AND FIDELITY OF E. COLI DNA POLYMERASE I* (PCM-8104433 A01); 12 MONTHS \$27,000
- HO, CHIEN; *STRUCTURE-FUNCTION RELATIONSHIPS IN BIOLOGICAL SYSTEMS* (PCM-8208829); 12 MONTHS \$65,000

DREXEL UNIVERSITY

- ITTER, KARLA S; *EFFECTS OF STEROLS ON PARASITIC INFECTIONS OF INSECTS* (PCM-8206541); 12 MONTHS \$39,589

HAVERFORD COLLEGE

- KESSLER, DIETRICH; *REGULATION OF CELL MOTILITY* (PCM-8016620 A02); 12 MONTHS \$50,000

INSTITUTE FOR CANCER RESEARCH

- WEEKS, DONALD P; *REGULATION OF TUBULIN SYNTHESIS IN CHLAMYDOMONAS REINHARDI* (PCM-8003438 A02); 12 MONTHS \$80,000
- PERRY, ROBERT P; *SYNTHESIS, ORGANIZATION AND FUNCTION OF RIBONUCLEIC ACID* (PCM-8010972 A02); 12 MONTHS \$150,000
- GLUSKER, JENNY P, AND CARRELL, HORACE L; *STRUCTURAL STUDIES OF D-XYLOSE ISOMERASE* (PCM-8104532 A01); 12 MONTHS \$50,400
- BAYER, MANFRED E; *STRUCTURAL AND FUNCTIONAL ORGANIZATION OF BACTERIAL AND VIRAL SURFACES AND THEIR INTERACTION WITH VIRUS PARTICLES* (PCM-8204286); 12 MONTHS \$35,000

MEDICAL COLLEGE OF PENNSYLVANIA

- MARSH, JULIAN B, ROTHBLAT, GEORGE, PHILLIPS, MICHAEL C, SPARKS, CHARLES E, AND GLICK, JANE M; *ACQUISITION OF ULTRACENTRIFUGE* (PCM-8115924); 12 MONTHS \$25,000

MONELL CHEMICAL SENSES CENTER

- PRETI, GEORGE, AND CUTLER, WINNIFRED B; *OLFACTORY INFLUENCES ON PHYSIOLOGICAL PARAMETERS* (BNS-8203018*); 24 MONTHS \$40,000

PENNSYLVANIA STATE UNIVERSITY

- WEDLER, FREDERICK C; *GLUTAMINE SYNTHETASE REGULATION AND THERMOSTABILITY* (PCM-7924481 A02); 12 MONTHS \$32,000
- BENKOVIC, STEPHEN J; *STUDIES OF PTERIN MECHANISMS* (PCM-8103670 A01); 12 MONTHS \$53,000
- MATTHEWS, C R, AND TU, CHEN-PEI D; *THE EFFECT OF AMINO ACID REPLACEMENTS ON PROTEIN FOLDING* (PCM-8104495 A01); 12 MONTHS \$46,000
- VILLAFRANCA, JOSEPH J; *STRUCTURE, FUNCTION AND CONTROL OF ATP UTILIZING ENZYMES* (PCM-8108094 A01); 12 MONTHS \$44,100
- MIZEL, STEVEN B; *MECHANISM OF ACTION OF INTERLEUKIN 1* (PCM-8110370 A01); 12 MONTHS \$55,000
- BERNLOHR, ROBERT W; *PATHWAYS OF GLUTAMINE AND ASPARAGINE BIOSYNTHESIS IN BACILLUS SPP.* (PCM-8121902); 12 MONTHS \$55,500
- FRISQUE, RICHARD J; *MOLECULAR ANALYSIS OF JCV INTERACTION WITH NON PERMISSIVE CELLS* (PCM-8123058); 24 MONTHS \$80,000
- SWARTHMORE COLLEGE
- JACOBS, MARK; *AUXIN'S REGULATION OF PLANT CELL ELONGATION* (PCM-8104438); 24 MONTHS \$55,050

TEMPLE UNIVERSITY-SCHOOL OF MEDICINE

- SIROVER, MICHAEL A; *CELL CYCLE EXCISION OF MUTAGENIC DNA ADDUCTS IN HUMAN CELLS* (PCM-8118176); 12 MONTHS \$50,000

TEMPLE UNIVERSITY

- BINKLEY, SUE A; *PINEAL FUNCTION IN BIRDS* (PCM-8020798 A01); 12 MONTHS \$60,000
- JENSEN, DAVID E; *NITROSO COMPOUND CHEMISTRY ASSOCIATED WITH THE DNA REPLICATION FORK* (PCM-8104030 A01); 12 MONTHS \$52,000

UNIVERSITY OF PENNSYLVANIA-SCHOOL OF MEDICINE

- CHANCE, BRITTON; *METALLOENZYMES, PROTEINS AND MOLECULES* (PCM-8026634 A01); 12 MONTHS \$100,000

- UNIVERSITY OF PENNSYLVANIA-SCHOOL OF VETERINARY MEDICINE
- WOLF, BENJAMIN; *REGULATION OF LATENT AND NOMINAL ALLOTYPES* (PCM-8013043 A02); 12 MONTHS \$55,000

UNIVERSITY OF PENNSYLVANIA

- GOTS, JOSEPH S; *GENE-ENZYME INTERACTIONS IN BACTERIA* (PCM-7905753 A02); 12 MONTHS \$60,000
- BONNER, WALTER D; *THE MOLECULAR BASIS OF ENERGY TRANSFER IN HIGHER AND LOWER PLANTS* (PCM-7914596 A02); 12 MONTHS \$80,000
- PRINCE, ROGER C; *STRUCTURE AND FUNCTIONS OF THE MEMBRANE ASSOCIATED UBIQUINONE-CYTOCHROME B-C₂ OXIDOREDUCTASE; ITS ISOLATION AND PHYSICAL PROPERTIES* (PCM-7919598 A02); 12 MONTHS \$40,000
- YONETANI, TAKASHI; *HEME ENZYMES: STRUCTURE, MECHANISM AND FUNCTION* (PCM-7922841 A02); 12 MONTHS \$58,500
- VANDERKOOI, JANE; *MOTION OF CYTOCHROME C DURING ELECTRON TRANSFER* (PCM-8003125 A02); 12 MONTHS \$50,000
- KALLENBACH, NEVILLE R; *H-EXCHANGE AND LIGANDING REACTION AS PROBES OF STRUCTURE AND STRUCTURAL FLUCTUATIONS IN NUCLEIC ACIDS* (PCM-8004043 A02); 12 MONTHS \$52,200
- ERICKSON, RALPH O; *GROWTH AND DEVELOPMENT OF HIGHER PLANTS* (PCM-8011346 A02); 12 MONTHS \$35,000
- ZIGMOND, SALLY H; *MODULATION OF THE CHEMOTACTIC PEPTIDE RECEPTOR OF PMNS* (PCM-8018585 A01); 12 MONTHS \$50,000
- BINNS, ANDREW N; *CROWN GALL: TUMOR PROGRESSION AND PLANT REGENERATION* (PCM-8104064 A01); \$10,000
- BINNS, ANDREW N; *CROWN GALL: TUMOR PROGRESSION AND PLANT REGENERATION* (PCM-8104064 A02); 12 MONTHS \$45,000
- COOPERMAN, BARRY S; *TETRACYCLINE: MECHANISMS OF ACTION AND RESISTANCE* (PCM-8104360 A01); 12 MONTHS \$60,000
- KAUFFMAN, STUART A; *MONOCLONAL ANTIBODIES AGAINST CELL SURFACE ANTIGENS OF DROSOPHILA EMBRYOS* (PCM-8110601 A01); 12 MONTHS \$35,000

- PLACE, ALLEN R; *THE KINETIC MECHANISM OF THE METAL-FREE ALCOHOL DEHYDROGENASE FROM DROSOPHILA MELANOGASTER* (PCM-8110819 A01); 12 MONTHS \$55,000

- OHNISHI, TOMOKO; *ELECTRON AND PROTON TRANSFER MECHANISM IN THE SUCCINATECYTOCHROME C REDUCTASE SEGMENT OF THE RESPIRATORY CHAIN* (PCM-8117284*); 12 MONTHS \$75,000

- TELFER, WILLIAM H; *PHYSIOLOGY OF OOGENESIS IN AN INSECT* (PCM-8118617); 12 MONTHS \$55,000

- ROTH, STEPHEN; *GLYCOSYLTRANSFERASES: BIOLOGY AND PATHOBIOLOGY* (PCM-8118625); 12 MONTHS \$45,000

- BLANKENHORN, ELIZABETH P; *STRUCTURAL STUDIES OF MHC POLYMORPHISM IN WILD RATS* (PCM-8119179); 12 MONTHS \$60,000

- ADLER, NORMAN T; *BIOPSYCHOLOGY OF REPRODUCTION* (BNS-8120816*); 12 MONTHS \$82,500

- OPPELLA, STANLEY J; *ACQUISITION OF SPECTROMETER FOR NMR STUDIES OF PROTEINS THAT INTERACT WITH DNA* (PCM-8207163); 24 MONTHS \$200,000

- SCHULTZ, RICHARD M; *CELL COMMUNICATION: ROLE IN OOCYTE GROWTH AND MEIOSIS* (PCM-8207322); 24 MONTHS \$120,000

- DUTTON, P L; *PHYSICAL CHEMICAL AND STRUCTURAL INVESTIGATION OF EARLY EVENTS IN BACTERIAL PHOTOSYNTHESIS* (PCM-8209232); 12 MONTHS \$67,000

UNIVERSITY OF PITTSBURGH

- HENDRIX, ROGER W; *ASSEMBLY OF BACTERIOPHAGE LAMBDA TAILS* (PCM-7910461 A02); 12 MONTHS \$30,000

- CHAY, TERESA R; *METASTABILITIES AND OSCILLATORY PHENOMENA IN MEMBRANES AND CELLULAR SYSTEMS* (PCM-7922483 A02); 12 MONTHS \$34,200

- HOPPER, SARAH P; *RIBONUCLEOTIDE REDUCTASE OF RABBIT BONE MARROW* (PCM-7923540 A02); 12 MONTHS \$76,000

- PIPAS, JAMES M; *THE ROLE OF SV40 T-ANTIGENS IN TUMORIGENICITY* (PCM-8021649 A01); 12 MONTHS \$44,000

- ASHER, SANFORD A; *ACQUISITION OF UV RESONANCE RAMAN SPECTROSCOPY* (PCM-8115738); 12 MONTHS \$90,000

- ONTELL, MARCIA; *GROWTH AND MATURATION OF LATE PRENATAL AND EARLY POSTNATAL STRIATED MUSCLE* (PCM-8209612); 24 MONTHS \$55,000

- SUSSMAN, MAURICE; *CELL COHESION & RELATED GENE EXPRESSION IN D. DISCOIDEUM* (PCM-8202903); 12 MONTHS \$50,000

WISTAR INSTITUTE

- SOLTER, DAVOR; *REGULATORY ROLE OF CELL SURFACE MOLECULES IN MAMMALIAN DEVELOPMENT* (PCM-8118801); 12 MONTHS \$55,000

PUERTO RICO

UNIV OF PUERTO RICO MEDICAL SCIENCES CAMPUS

- KRAUSELBERG, EDMUNDO; *INDUCTION OF SOMATIC CELL MUTATIONS BY HERPES SIMPLEX* (PCM-7901189 A02); 12 MONTHS \$44,700

UNIVERSITY OF PUERTO RICO, RIO PIEDRAS

- CANDELAS, GRACIELA C; *STUDIES ON TRANSLATION IN A SPIDER FI-BROIN* (PCM-8103284 A01); 12 MONTHS \$38,500

RHODE ISLAND

BROWN UNIVERSITY

- COLEMAN, ANNETTE W; *FUNCTIONAL ORGANIZATION OF CHLOROPLAST DNA* (PCM-7923054 A02); 12 MONTHS \$33,867

- FAUSTO-STERLING, ANNE; *CELLULAR ADHESIVITY AND THE DETERMINED STATE IN IMAGINAL DISC CELLS OF D. MELANOGASTER* (PCM-7924063 A02); 12 MONTHS \$65,000

ROTHMAN, FRANK G; CELL DIFFERENTIATION IN *DICTYOSTELIUM DISCOIDEUM* (PCM-8104041 A01); 12 MONTHS \$60,000
 COLEMAN, ANNETTE W; STRUCTURAL ORGANIZATION OF THE CHLOROPLAST GENOME (PCM-8108122); 12 MONTHS \$50,000
 GOLDSTEIN, LEON; REGULATION OF β -AMINO ACID METABOLISM/EXCRETION IN FISH (PCM-8109706); 12 MONTHS \$21,330
 GERBI, SUSAN A; GENE AMPLIFICATION: SCIARID DNA PUFFS (PCM-8117765); 12 MONTHS \$50,000

BEALE, SAMUEL I, COLEMAN, ANNETTE W, AND ROTHMAN, FRANK G; ACQUISITION OF DUAL MONOCHROMATOR SCANNING SPECTROFLUOROMETER (PCM-8200383); 12 MONTHS \$20,000

JACKSON, DONALD C; MECHANISMS OF ACID-BASE BALANCE IN ECTOTHERMIC VERTEBRATES (PCM-8202419); 12 MONTHS \$57,000

MAGINNISS, LEIGH A; OXYGEN TRANSPORT IN A PASSERINE BIRD POSSESSING MULTIPLE HEMOGLOBINS (PCM-8202702); 12 MONTHS \$25,243

GORDON RESEARCH CONFERENCES

CRUICKSHANK, ALEXANDER M; GORDON RESEARCH CONFERENCES, NEW HAMPSHIRE: JUNE 1 SEPTEMBER 15, 1982 (04M-8209050*); 6 MONTHS \$55,960

UNIVERSITY OF RHODE ISLAND

BROWN, PHYLLIS R; ACQUISITION OF HIGH PERFORMANCE LIQUID CHROMATOGRAPHIC EQUIPMENT FOR STUDIES ON NUCLEIC ACID COMPONENTS (PCM-8115196); 12 MONTHS \$25,000

SOUTH CAROLINA

CLEMSON UNIVERSITY

WOURMS, JOHN P; MATERNAL-FETAL NUTRIENT TRANSFER IN VIVIPAROUS TELEOSTEAN FISHES (PCM-8208525); 12 MONTHS \$40,000

MEDICAL UNIVERSITY OF SOUTH CAROLINA

WARR, GREGORY W; THE EVOLUTION OF LYMPHOCYTE RECOGNITION (PCM-8108872 A01); 12 MONTHS \$60,000

WANG, AN-CHUAN; MOLECULAR ASPECTS OF LYMPHOCYTE DIFFERENTIATION (PCM-8201757*); 24 MONTHS \$84,000

KARAM, JIM D; TRANSLATIONAL CONTROL OF T4 PHAGE GENE EXPRESSION (PCM-8201869); 12 MONTHS \$51,792

CHENG, THOMAS C; CHARACTERIZATION OF OYSTER LEUKOCYTE RECEPTORS (PCM-8208016); 24 MONTHS \$145,000

UNIVERSITY OF SOUTH CAROLINA AT COLUMBIA

ELY, BERT E; GENETIC ANALYSIS OF DIFFERENTIATION IN CAULOBACTER CRESCENTUS (PCM-8003729 A02); 12 MONTHS \$60,000

SAWYER, ROGER H; CHORIONIC EPITHELIUM AND THE SCALELESS MUTANT CHICKEN (PCM-8011745 A02); 12 MONTHS \$70,000

LINCOLN, THOMAS M; CYCLIC GMP-DEPENDENT PROTEIN KINASE IN CARDIAC AND SMOOTH MUSCLE (PCM-8021205 A01); 12 MONTHS \$49,000

WATABE, NORIMITSU, AND WILBUR, KARL M; MECHANISMS OF CALCIFICATION IN OCTOCORALS (PCM-8201389); 12 MONTHS \$60,738

SOUTH DAKOTA

UNIVERSITY OF SOUTH DAKOTA MAIN CAMPUS

QUACKENBUSH, ROBERT L, AND DILTS, JUDITH A; GENETICS AND MOLECULAR BIOLOGY OF *CAEDOBACTER* (PCM-8113203); 24 MONTHS \$100,000

TENNESSEE

EAST TENNESSEE STATE UNIVERSITY

MCDANIEL, MILDRED C; CHARACTERIZATION OF TUMORICIDAL MACROPHAGE MEDIATORS (PCM-8007869 A02); 12 MONTHS \$39,015

MEMPHIS STATE UNIVERSITY

GARTNER, T KENT; MECHANISM OF SECRETION DEPENDENT PLATELET AGGREGATION (PCM-8201960); 24 MONTHS \$90,000

OAK RIDGE NATIONAL LABORATORY

KOEHLER, WALTER C, AND HENDRICKS, ROBERT W; THE OPERATION OF THE NATIONAL CENTER FOR SMALL-ANGLE SCATTERING RESEARCH (DMR-8020167 A02*); 12 MONTHS \$155,347

ST JUDE CHILDREN'S RESEARCH HOSPITAL

AHMED, NAHED K; SALVAGE MECHANISMS AND THE ROLE OF A NEW PHOSPHORYLATING ACTIVITY (PCM-8012099 A01); 12 MONTHS \$24,000

SCHONBAUM, GREGORY R; THE PROPERTIES AND FUNCTION OF PEROXIDASES (PCM-8023973 A01); 12 MONTHS \$46,800

FRIED, VICTOR A; BIOGENESIS AND ASSEMBLY OF THE LAC PERMEASE OF *E. COLI* (PCM-8202721); 12 MONTHS \$45,000

UNIVERSITY OF TENNESSEE AT KNOXVILLE

SKINNER, DOROTHY M; EUKARYOTIC GENOME WITH EMPHASIS ON SATELLITE DNAs (PCM-7823373 A02); 12 MONTHS \$80,000

JEON, KWANG W; ENDOSYMBIOSIS AND ORIGIN OF EUKARYOTIC CELL ORGANELLES (PCM-7921969 A02); 12 MONTHS \$35,000

HECKMAN, CAROL A; CELLULAR BASIS OF TRANSFORMATION (PCM-8110597 A01); 12 MONTHS \$36,918

STACEY, GARY; HOST RECOGNITION IN THE NITROGEN-FIXING RHIZOBIUM JAPONICUM-SOYBEAN SYMBIOSIS (PCM-8117060); 24 MONTHS \$90,000

UNIVERSITY OF TENNESSEE CENTER FOR HEALTH SCI

SHARMA, RAMESHWAR K; REGULATION OF STEROIDOGENESIS (PCM-8008730 A02); 12 MONTHS \$58,000

VANDERBILT UNIVERSITY-SCHOOL OF MEDICINE

HARSHMAN, SIDNEY; ALPHA TOXIN: CHEMISTRY AND ACTION ON MEMBRANES (PCM-8118653); 12 MONTHS \$35,000

VANDERBILT UNIVERSITY

DI SABATO, GIOVANNI; STUDIES ON THE MECHANISM OF ACTION OF THYMOCYTE STIMULATING FACTOR (PCM-8011018 A02); 12 MONTHS \$50,000

BIBRING, THOMAS; CONTROL OF DIVERSITY IN MICROTUBULE SYSTEMS (PCM-8105681 A01); 12 MONTHS \$46,000

FLEISCHER, BECCA; STRUCTURE AND FUNCTION OF THE GOLGI APPARATUS (PCM-8207526); 24 MONTHS \$145,000

LE STOURGEON, WALLACE M; THE STRUCTURE AND FUNCTION OF NUCLEAR HNRNP PARTICLES IN RNA SPLICING (PCM-8209420); 12 MONTHS \$60,000

WATTERSON, DANIEL M; STRUCTURE AND FUNCTION OF PLANT CALMODULINS (PCM-8242875); 12 MONTHS \$50,000

TEXAS

BAYLOR COLLEGE OF MEDICINE

WAKIL, SALIH J; METABOLISM AND CONTROL OF FATTY ACIDS (PCM-7700869 A04); 12 MONTHS \$38,000

BEATTIE, KENNETH L; THE ENZYMOLOGY OF MUTAGENESIS (PCM-7813695 A02); 6 MONTHS \$8,000

KELLEMS, RODNEY E; STRUCTURE AND FUNCTION OF AMPLIFIED GENES (PCM-8104533 A01); 12 MONTHS \$63,145

BARNES, EUGENE M; TRANSPORT OF AMMONIA BY NITROGEN-FIXING BACTERIA (PCM-8109707); 12 MONTHS \$38,101

SCHRADER, WILLIAM T; PROGESTERONE RECEPTOR BINDING SITE: THREE-DIMENSIONAL STRUCTURE (PCM-8111003*); 12 MONTHS \$35,000

DRESDEN, MARC H; BIOCHEMICAL AND IMMUNOLOGICAL STUDIES OF INFECTION BY *STRONGYLOIDES RANSOMI* (PCM-8208326); 24 MONTHS \$105,000

BAYLOR UNIVERSITY

MOORE, RANDY C; SYMPOSIUM: VEGETATIVE COMPATIBILITY RESPONSES IN PLANTS AUGUST 8-13, 1982, PENN STATE UNIVERSITY, UNIVERSITY PARK, PA (PCM-8202719); 6 MONTHS \$1,000

MOORE, RANDY C; GRAFT COMPATIBILITY-INCOMPATIBILITY IN HIGHER PLANTS (PCM-8207833); 24 MONTHS \$65,000

RICE UNIVERSITY

CAMPBELL, JAMES W; CELLULAR MECHANISMS OF AMMONIA DETOXICATION (PCM-7925911 A01); 12 MONTHS \$54,300

MATTHEWS, KATHLEEN S; CHEMICAL STUDIES OF LAC REPRESSOR PROTEIN AND OPERATOR DNA (PCM-8012048 A02); 12 MONTHS \$40,000

SUL ROSS STATE UNIVERSITY

MILLER, JOHN M; RUBBER VARIATION AND REPRODUCTIVE BIOLOGY IN NATIVE STANDS OF *PARthenium argentatum* GRAY (PCM-8120829); 24 MONTHS \$52,448

TEXAS A & M UNIVERSITY

VINSON, S B; INSECT IMMUNE MECHANISMS ASSOCIATED WITH THE PARASITOID-HOST RELATIONSHIP (PCM-8021646 A01); 12 MONTHS \$32,746

O'DONOVAN, GERARD A, AND WILD, JAMES R; CATALYTIC AND REGULATORY PROPERTIES OF HYBRID ATCASES FORMED WITH NATIVE SUBUNITS FROM DIVERGENT BACTERIA (PCM-8021983 A01); 12 MONTHS \$45,000

SUMMERS, MAX D, AND VINSON, S B; CHARACTERIZATION AND BIOLOGICAL SIGNIFICANCE OF PARASITOID VIRUSES (PCM-8021992 A01); 12 MONTHS \$51,735

BENEDICT, CHAUNCEY R; THE METABOLIC ACTION OF BIOREGULATORS IN THE INDUCTION OF CIS-POLYISOPRENES (RUBBER) IN GUAYULE PLANTS (PCM-8104623 A01); 12 MONTHS \$79,733

BICKHAM, JOHN W; CYTOGENETIC STUDIES OF SEX-AUTOSOME TRANSLOCATIONS IN THE BAT FAMILY PHYLLOSTOMATIDAE (PCM-8202794); 12 MONTHS \$49,521

BALDWIN, THOMAS O, AND SANDER, EUGENE G; THE STRUCTURE AND ACTION OF BACTERIAL LUCIFERASE: A MODEL FLAVIN HYDROXYLASE SYSTEM (PCM-8241242); 12 MONTHS \$43,000

TEXAS TECH UNIVERSITY

PANG, PETER K; CALCIUM-REGULATING AND VASCULAR ACTIONS OF SOME HORMONES IN LOWER VERTEBRATES (PCM-8105425 A01); 12 MONTHS \$47,094

KNAFF, DAVID B; ELECTRON FLOW AND METABOLITE UPTAKE IN PHOTOSYNTHETIC ORGANISMS (PCM-8109635 A01); 12 MONTHS \$45,000

JOYS, TERENCE M; EVOLUTIONARY LEeway IN AN UNUSUALLY CONSTRAINED PROTEIN, BACTERIAL FLAGELLIN (PCM-8118313); 24 MONTHS \$90,000

SHAW, ROBERT W; ACQUISITION OF AN ELECTRON PARAMAGNETIC RESONANCE SPECTROMETER (PCM-8119188); 12 MONTHS \$80,500

SONG, PILL-SOON; PRIMARY MOLECULAR PROCESSES OF PHOTOMORPHOGENIC RECEPTOR: PHYTOCHROME (PCM-8119907); 12 MONTHS \$50,000

UNIV OF TEXAS AT AUSTIN-MARINE SCIENCE INSTITUTE AT PORT

ARANSAS

CAMERON, JAMES N; PH AND ACID-BASE REGULATION IN ECTOTHERMS (PCM-8020982 A01); 12 MONTHS \$41,000

UNIV OF TEXAS AT AUSTIN

BROWN, DENNIS T; THE DEVELOPMENT OF VIRAL ANTIGENS (PCM-8004302 A02); 12 MONTHS \$45,000

FORREST, HUGH S; *THE BIOCHEMISTRY OF METHOXATIN - A NEW COENZYME* (PCM-8014340 A02); 12 MONTHS \$30,000

WALKER, JAMES R; *REGULATION OF BACTERIAL CELL DIVISION* (PCM-8102796 A01); 12 MONTHS \$65,000

ROUX, STANLEY J; *CHARACTERIZATION OF PHYTOCHROME IN INTERACTION WITH MEMBRANES* (PCM-810429 A0); 12 MONTHS \$46,800

RANKIN, MARY ANN; *HORMONAL CONTROL OF INSECT MIGRATORY BEHAVIOR* (PCM-8110568 A01); 12 MONTHS \$47,657

HARDESTY, BOYD A; *THE MECHANISM BY WHICH RIBOSOMES FORM PEPTIDES* (PCM-8112248); 12 MONTHS \$65,000

LA CLAIRE, JOHN W; *EXPERIMENTAL AND ULTRASTRUCTURAL STUDIES OF WOUND-INDUCED PROTOPLASMIC MOTILITY IN THE GREEN ALGA ERNODESMIS* (PCM-8117815); 24 MONTHS \$77,745

THOMPSON, GUY A; *THE BIOCHEMICAL REGULATION OF MEMBRANE FORM AND FUNCTION* (PCM-8200289); 12 MONTHS \$74,069

CREW3, DAVID P; *PARTHENOGENESIS: A MODEL FOR SEXUAL DIFFERENTIATION* (BNS-8202531*); 12 MONTHS \$20,000

RIGGS, AUSTEN F; *BIOCHEMISTRY OF HEMOGLOBINS AND OXYGEN TRANSPORT* (PCM-8202760); 12 MONTHS \$40,000

BRONSON, F H; *ENVIRONMENTAL REGULATION OF MAMMALIAN REPRODUCTION* (PCM-8208389); 24 MONTHS \$138,000

BROWN, R M; *CELLULOSE MICROFIBRIL ASSEMBLY AND ORIENTATION: ROLES IN PLANT GROWTH AND DEVELOPMENT* (PCM-8242213); 12 MONTHS \$59,356

UNIV OF TEXAS AT DALLAS

BREEN, GAIL A; *MAMMALIAN MUTANTS WITH ALTERATIONS IN THE MITOCHONDRIAL ATPASE* (PCM-8011249 A01); 12 MONTHS \$50,000

CLOWES, ROYSTON C; *ACQUISITION OF ELECTRON MICROSCOPE* (PCM-8116109); 12 MONTHS \$115,000

UNIV OF TEXAS HEALTH SCI CENTER AT SAN ANTONIO

REITER, RUSSEL J; *PINEAL-REPRODUCTIVE INTERACTIONS* (PCM-8003441 A03); 12 MONTHS \$80,156

HERBERT, DAMON C; *NEUROENDOCRINE AXIS OF THE MALNOURISHED RAT* (PCM-8118487); 24 MONTHS \$120,000

HALDENWANG, WILLIAM G; *MULTIPLE SIGMA-LIKE SUBUNITS OF BACILLUS SUBTILIS RNA POLYMERASE* (PCM-8241253); 12 MONTHS \$53,701

UNIV OF TEXAS HEALTH SCI CENTER AT SAN ANTONIO-UNIVERSITY OF TEXAS MEDICAL SCHOOL

JACOBS, JOHN W; *CALCITONIN: GENE STRUCTURE AND REGULATION* (PCM-8200875); 12 MONTHS \$33,814

UNIV OF TEXAS HEALTH SCIENCE CENTER AT DALLAS-UNIV OF TEXAS GRAD SCHOOL OF BIOMEDICAL SCI

MAC DONALD, RAYMOND J; *ORGANIZATION AND EXPRESSION OF PANCREATIC SERINE PROTEASE GENES* (PCM-8006231 A02); 12 MONTHS \$60,000

SRERE, PAUL A; *STRUCTURES AND MECHANISMS OF CITRATE ENZYMES* (PCM-8107190); 12 MONTHS \$45,000

SRERE, PAUL A; *THE INFRASTRUCTURE OF MITOCHONDRIAL MATRIX PROTEINS* (PCM-8204114); 24 MONTHS \$76,000

UNIV OF TEXAS HEALTH SCIENCE CENTER AT DALLAS-UNIV OF TEXAS SOUTHWESTERN MEDICAL SCHOOL

CAPRA, J DONA; *IMMUNOCHEMICAL AND IMMUNOGENETIC STUDIES OF GAMMA GLOBULIN* (PCM-7923480 A02); 12 MONTHS \$52,000

UNIV OF TEXAS HEALTH SCIENCE CENTER AT HOUSTON

FRIEDMANN, NAOMI; *ROLE OF ION FLUXES IN THE GLUCONEOGENIC RESPONSE* (PCM-8114547); 12 MONTHS \$59,929

JULIANO, R L; *MOLECULAR ORGANIZATION OF A MAMMALIAN CELL MEMBRANE* (PCM-8117019); 12 MONTHS \$49,541

WOLF, DON P; *SURFACE COMPONENTS OF SPERM CELLS* (PCM-8202536); 24 MONTHS \$90,430

UNIV OF TEXAS HEALTH SCIENCE CENTER AT HOUSTON-UNIVERSITY OF TEXAS MEDICAL SCHOOL AT HOUSTON

BERGET, PETER B; *MOLECULAR MECHANISMS OF PHAGE T4 BASE-PLATE ASSEMBLY* (PCM-8104523 A01); 12 MONTHS \$49,000

UNIV OF TEXAS MEDICAL BRANCH AT GALVESTON

BOTTENSTEIN, JANE E; *HUMAN NEUROBLASTOMA CELL PROLIFERATION* (PCM-8121872); 24 MONTHS \$100,000

UNIVERSITY OF HOUSTON CENTRAL CAMPUS

HAZELWOOD, ROBERT L; *RELEASE AND BASIC PHYSIOLOGY OF AVIAN PANCREATIC POLYPEPTIDE* (PCM-8003688 A02); 12 MONTHS \$42,000

BAUST, JOHN G; *LOW TEMPERATURE AND FREEZING TOLERANCE IN INSECTS* (PCM-8110327 A01); 12 MONTHS \$21,406

MCCAMMON, JAMES A; *THEORY OF BIOMOLECULAR STRUCTURE AND DYNAMICS* (PCM-8201204); 12 MONTHS \$60,000

BAUST, JOHN G; *SYMPOSIUM ON WATER AND ADAPTATION: ARE THERE COMMON DENOMINATORS?* HOUSTON, TX, JUNE 27 - JULY 1, 1982 (PCM-8201213*); 6 MONTHS \$33,000

UTAH

UNIVERSITY OF UTAH-COLLEGE OF MEDICINE

ASH, JOHN F; *THE PROCESSING OF CLUSTERED MEMBRANE PROTEINS* (PCM-8011153 A01); 12 MONTHS \$45,000

CASJENS, SHERWOOD; *DNA PACKAGING BY BACTERIOPHAGE P22* (PCM-8017177 A01); 12 MONTHS \$39,000

SUMMERS, DONALD F; *COMPOSITION AND MATURATION OF VESICULAR STOMATITIS VIRUS AND ITS INTERACTION WITH HOST CELLS* (PCM-8110986 A01); 12 MONTHS \$63,000

UNIVERSITY OF UTAH

FRANKLIN, NAOMI C; *GENETIC DESCRIPTION OF THE N PROTEIN OF BACTERIOPHAGE LAMBDA* (PCM-8009356 A01); 12 MONTHS \$83,723

LARK, KARL G; *SOMATIC GENETICS OF PLANT CELLS IN SUSPENSION CULTURE* (PCM-8010771 A01); 12 MONTHS \$42,846

SCHWEIZER, MARTIN P; *FUNCTION OF UNUSUAL NUCLEOSIDES IN TRANSFER RNA* (PCM-8022615 A01); 12 MONTHS \$62,100

UTAH STATE UNIVERSITY

TAKEMOTO, JON Y, AND FARLEY, THOMAS M; *TOPOGRAPHICAL STUDIES OF BACTERIAL PHOTOSYNTHETIC MEMBRANES* (PCM-8103246 A01); 12 MONTHS \$36,000

VAN ALFEN, NEAL K; *THE NATURE OF HYPOVIRULENCE OF CHEST-NUT BLIGHT* (PCM-8103255 A01); 12 MONTHS \$48,150

VERMONT

UNIVERSITY OF VERMONT

PENNYPACKER, JOHN P; *CELL SURFACE-EXTRACELLULAR MATRIX INTERACTIONS* (PCM-8003769 A02); 12 MONTHS \$50,000

ULLRICH, ROBERT C; *ISOLATING REGULATORY, DEVELOPMENTAL AND HOUSEKEEPING GENES FROM THE FUNGUS SCHIZOPHYLLUM* (PCM-8004589 A01); \$11,081

WILSON, THOMAS G; *JUVENILE HORMONE AND DROSOPHILA DEVELOPMENT* (PCM-8112221 A01); 12 MONTHS \$35,000

ULLRICH, ROBERT C; *TRANSFORMATION OF SCHIZOPHYLLUM COMMUNE AND ISOLATION OF MATING-TYPE GENES* (PCM-8203496); 24 MONTHS \$20,000

VIRGINIA

COLLEGE OF WILLIAM AND MARY

MANGUM, CHARLOTTE P; *THE ADAPTABILITY OF HEMIPYCNIN-OXYGEN TRANSPORT SYSTEMS TO PHYSIOLOGICAL AND ENVIRONMENTAL CHANGE* (PCM-8018709 A01); 12 MONTHS \$54,338

UNIVERSITY OF VIRGINIA-SCHOOL OF MEDICINE

ENGELHARD, VICTOR H; *ANTIGEN STIMULATION OF CYTOTOXIC T LYMPHOCYTE PRECURSORS* (PCM-8104358 A01); 12 MONTHS \$50,620

KING, MARY LOU; *RECRUITMENT OF MATERNAL MRNA DURING EMBRYOGENESIS* (PCM-8112215 A01); 12 MONTHS \$56,977

WAGNER, ROBERT R; *REGULATORY FUNCTIONS AND STRUCTURE OF VIRAL MEMBRANES* (PCM-8201219); 24 MONTHS \$60,000

UNIVERSITY OF VIRGINIA

KADNER, ROBERT J; *GENETIC CONTROL OF MEMBRANE TRANSPORT* (PCM-7826711 A02); 12 MONTHS \$43,046

FLICKINGER, CHARLES J; *SECRETION IN THE EPIDIDYMIS* (PCM-7922242 A02); 12 MONTHS \$61,338

HECHT, SIDNEY M; *AMINO ACID SUBSTITUTIONS IN BACTERIOPHAGE T4 LYSOZYME* (PCM-7923063 A02); 12 MONTHS \$36,000

BILTONEN, RODNEY L; *LIPID STRUCTURAL FLUCTUATIONS AND MEMBRANE FUNCTION* (PCM-8003645 A02); 12 MONTHS \$47,700

REBHUN, LIONEL I; *ANALYSIS OF MITOSIS IN MAMMALIAN CELLS USING SOMATIC CELL GENETICS* (PCM-8011676 A01); 12 MONTHS \$50,000

LITMAN, BURTON J; *THE EFFECT OF PROTEIN-PHOSPHOLIPID INTERACTIONS ON THE CONFORMATIONAL STABILITY OF MEMBRANE PROTEIN* (PCM-8012028 A02); 12 MONTHS \$45,000

HANSON, MAUREEN R; *FATE OF PLASTID GENOMES FOLLOWING PLANT PROTOPLAST FUSION* (PCM-8104281 A01); 12 MONTHS \$48,000

B'ALL, ARTHUR S; *MAGNETIC STUDIES OF TRANSITION METAL IONS COORDINATED TO PROTEINS AND TO PROSTHETIC GROUPS* (PCM-8104377 A01); 12 MONTHS \$58,600

GARRETT, REGINALD H; *THE ENZYMOLOGY OF NITRATE ASSIMILATION* (PCM-8110121); 12 MONTHS \$35,000

BEYER, ANN L; *HNRNP STRUCTURE IN ADENOVIRUS-2 INFECTED HELA CELLS* (PCM-8110324 A01); 12 MONTHS \$45,000

GARRETT, REGINALD H; *THE REGULATION OF NITRATE ASSIMILATION* (PCM-8203160); 12 MONTHS \$35,000

ADLER, PAUL N; *POSITIONAL INFORMATION IN DROSOPHILA DEVELOPMENT* (PCM-8203205); 24 MONTHS \$90,000

CREUTZ, CARL E; *MOLECULAR BASIS OF MEMBRANE FUSION IN EXOCYTOSIS* (PCM-8206453); 24 MONTHS \$140,000

GRAINGER, ROBERT M; *CONTROL OF DEVELOPMENTAL PATHWAYS IN EMBRYONIC TISSUES* (PCM-8208266); 24 MONTHS \$40,000

VIRGINIA COMMONWEALTH UNIVERSITY

SCHIRCH, LAVERNE; *MECHANISM OF ENZYMES INVOLVED IN ONE-CARBON METABOLISM* (PCM-8110363 A01); 12 MONTHS \$47,000

SHAW, JACK M; *LIPOPROTEIN INTERACTION WITH CELL SURFACES AND MEMBRANES* (PCM-8205348); 24 MONTHS \$76,000

VIRGINIA POLYTECHNIC INSTITUTE

ROSS, MARY H; *CHROMOSOME BEHAVIOR AND ITS CONTROL IN TRANSLOCATION HETEROZYGOTES OF BLATTELLA GERMANICA* (PCM-8001620 A02); 12 MONTHS \$27,982

STORRIE, BRIAN; *METABOLISM OF ENDOCYTIC MEMBRANE IN FIBROBLASTS* (PCM-8020967 A01); 12 MONTHS \$48,443

BATES, ROBERT C; *REPLICATION OF PARVOVIRUS DNA* (PCM-8021878 A01); 12 MONTHS \$50,000

KINGSTON, DAVID G; *BIOSYNTHETIC STUDIES ON ANTIBIOTICS OF THE VIRGINIAMYCIN FAMILY* (PCM-8111508); 36 MONTHS \$102,695

CHEN, JIANN-SHI; *HYDROGENASE OF METHANOGENIC BACTERIA* (PCM-8203175); 18 MONTHS \$70,000

ANDERSON, BRUCE M. STUDIES ON THE MECHANISM OF ACTION OF PYRIDINE NUCLEOTIDE DEPENDENT ENZYMES (PCM-8206712); 12 MONTHS \$35,000

KEENAN, THOMAS W. ROLE OF MAMMARY EPITHELIAL CELLULAR ENOMEMBRANES IN MILK FORMATION (PCM-8241913); 12 MONTHS \$45,000

WASHINGTON

EVERGREEN STATE COLLEGE

KUTTER, ELIZABETH M. GENETIC REGULATORY MECHANISMS OF BACTERIOPHAGE T₄ (PCM-7905626 A02); 12 MONTHS \$40,000

KUTTEL, ELIZABETH M. GENETIC REGULATORY MECHANISMS OF BACTERIOPHAGE T₄ (PCM-8203498); 12 MONTHS \$50,400

FRED HUTCHINSON CANCER RESEARCH CENTER

NEWMAN, WALTER. THE SPECIFICITY OF HUMAN CYTOTOXIC CELLS (PCM-8008749 A02); 12 MONTHS \$30,000

GROUDINE, MARK T. REGULATION OF EXPRESSION OF RETROVIRAL AND OTHER CELLULAR GENES IN NORMAL AND TRANSFORMED AVIAN CELLS (PCM-8204696); 12 MONTHS \$77,428

UNIVERSITY OF WASHINGTON-SCHOOL OF MEDICINE

STEWART, DANIEL R. MECHANISM FOR HORMONAL STIMULATION OF ADENYLATE CYCLASE (PCM-8007327 A02); 12 MONTHS \$42,000

LOEB, LAWRENCE A. THE MOLECULAR BASIS OF MUTAGENESIS (PCM-8018838 A01); 12 MONTHS \$25,000

MORRIS, DAVID R. REGULATION OF EARLY EVENTS IN LYMPHOCYTE MITOGENESIS (PCM-8021132 A01); 12 MONTHS \$45,000

HERRIOTT, JON R. THE STRUCTURE OF FERREDOXIN REDUCTASE (PCM-8109700 A01); 12 MONTHS \$33,300

SHAPIRO, BENNETT M. THE SPERM AND EARLY EMBRYONIC DEVELOPMENT (PCM-8209399); 12 MONTHS \$58,000

UNIVERSITY OF WASHINGTON

POCKER, YESHAYAU. RELATIONSHIPS BETWEEN ACTIVITY AND STRUCTURE OF ENZYMES (PCM-7921417 A02); 12 MONTHS \$55,000

GORBMAN, AUBREY. CYCLOSTOME ENDOCRINOLOGY (PCM-8002352 A02); 12 MONTHS \$76,346

RIDDIFORD, LYNN M. CHEMICAL CONTROL OF INSECT METAMORPHOSIS AND BEHAVIOR (PCM-8011152 A01); 12 MONTHS \$56,000

PARSON, WILLIAM W. LASER FLASH STUDIES OF BACTERIAL PHOTOSYNTHESIS (PCM-8016593 A02); 12 MONTHS \$67,500

BENDICH, ARNOLD J. WHY IS THERE SO MUCH DNA IN PLANTS (PCM-8016594 A01); \$6,999

FARNER, DONALD S. ENVIRONMENTAL INFORMATION AND ENDOGENOUS PERIODIC FUNCTIONS IN THE CONTROL OF REPRODUCTIVE AND RELATED CYCLES (PCM-8018019 A01); 12 MONTHS \$56,121

REID, BRIAN R. AND KIRWAN, ALVIN L. HIGH RESOLUTION NMR STUDIES OF BIOCHEMICAL SYSTEMS (PCM-8018053 A01); 12 MONTHS \$25,000

TRUMAN, JAMES W. FUNCTIONS OF HORMONES AND CIRCADIAN RHYTHMS IN THE REGULATION OF INSECT BEHAVIOR (PCM-8020975 A01); 12 MONTHS \$55,000

AGABIAN, NINA. SPATIAL CONTROL OF CELL DEVELOPMENT IN CAULOBACTER (PCM-8021551 A01); 12 MONTHS \$34,975

AGABIAN, NINA. ANTIGENIC VARIATION IN TRYPANOSOMA B. GAMBIENSE (PCM-8021995 A01); 12 MONTHS \$50,450

CATTOLICO, ROSE ANN. ORGANELLE BIOGENESIS IN MULTIPASTIC CELLS (PCM-8022653 A01); 12 MONTHS \$50,125

SCHURR, J. M. DYNAMICS OF ELEMENTARY PROCESSES IN SOLUTIONS OF BIOPOLYMERS AND BIOCOLLOIDS (PCM-8022822 A01); 12 MONTHS \$58,500

SCHUBIGER, GEROLD A. EMBRYOGENESIS AND DISC DEVELOPMENT IN DROSOPHILA (PCM-8024535 A01); 12 MONTHS \$64,000

CLELAND, ROBERT E. THE CONTROL OF LEAF DEVELOPMENT: CONTROL BY CELLULAR PARAMETERS (PCM-8117994); 12 MONTHS \$60,753

BAKKEEN, AIMEE H. CHROMOSOME STRUCTURE AND FUNCTION DURING EARLY DEVELOPMENT (PCM-8119164); 12 MONTHS \$60,002

SCHROEDER, THOMAS E. CONTROL OF THE CORTICAL CYTOSKELETON (PCM-8201866); 12 MONTHS \$55,000

HUTCHINSON, THOMAS E. ELECTRON PROBE ANALYSIS (PCM-8202439); 24 MONTHS \$40,941

STERN, EDWARD A. AND PARSON, WILLIAM W. STUDIES ON BIOLOGICAL SYSTEMS WITH EXAFS (PCM-8204234); 12 MONTHS \$64,000

WASHINGTON STATE UNIVERSITY

MC FADDEN, BRUCE A. ISOCITRATE LYASE AND THE GLYOXYLATE CYCLE (PCM-7909786 A02); 12 MONTHS \$51,653

KIRSCHNER, LEONARD B. SOLUTE AND WATER FLUXES ACROSS REGULATORY EPITHELIA (PCM-8003800 A02); 12 MONTHS \$48,000

KOLATTUKUDY, P. E. STRUCTURE, BIOSYNTHESIS AND DEGRADATION OF THE BIOPOLYMERS CUTIN AND SUBERIN (PCM-8007908 A01); 12 MONTHS \$101,230

RYAN, CLARENCE A. STRUCTURE AND MODE OF ACTION OF PIIF, A PLANT WOUND HORMONE (PCM-8023285 A01); 12 MONTHS \$53,442

THOMASHOW, MICHAEL F. EXPRESSION OF T-DNA SEQUENCES IN CROWN GALL TUMORS (PCM-8109451); 24 MONTHS \$100,000

WARNER, ROBERT L. PHYSIOLOGY OF NITRATE REDUCTASE-DEFICIENT MUTANTS IN HORDEUM VULGARE (PCM-8119096); 24 MONTHS \$80,000

LURQUIN, PAUL F. AND KLEINHAFS, ANDRIS. NATO ADVANCED STUDY INSTITUTE ON GENETIC ENGINEERING IN EUKARYOTES. PULLMAN, WASHINGTON; JULY 26 - AUGUST 6, 1982 (PCM-8120924); 6 MONTHS \$3,000

HADWIGER, LEE A. ROLE OF HEXOSAMINE POLYMERS IN DISEASE RESISTANCE (PCM-8203176); 24 MONTHS \$101,426

LOEWUS, FRANK A. BIOSYNTHESIS AND METABOLISM OF ASCORBIC ACID IN PLANTS (PCM-8203546); 24 MONTHS \$68,000

CROTEAU, RODNEY. BIOSYNTHESIS OF MONOTERPENES (PCM-8204391); 12 MONTHS \$53,440

EDWARDS, GERALD E. PHOTOSYNTHETIC METABOLISM IN ISOLATED CELLS AND PROTOPLASTS FROM C₄ PLANTS (PCM-8204625); 12 MONTHS \$52,000

PATE, EDWARD F. ANALYSIS OF THE RELATIONSHIP BETWEEN MUSCLE PHYSIOLOGY AND MUSCLE BIOCHEMISTRY (PCM-8208292); 12 MONTHS \$27,931

POOVAIAH, B. W. AUXIN-BINDING PROTEINS AS RECEPTORS MEDIATING FRUIT GROWTH (PCM-8208408); 12 MONTHS \$48,000

WEST VIRGINIA

WEST VIRGINIA UNIVERSITY

THOMPSON, HERBERT A. PROTEIN SYNTHESIS DURING THE COXIELLA BURNETII INFECTIOUS CYCLE (PCM-8205278); 12 MONTHS \$48,000

WISCONSIN

MARQUETTE UNIVERSITY

NAKAMOTO, KOTUO. VIBRATIONAL SPECTRA OF CYTOCHROMES (PCM-8114676); 12 MONTHS \$55,000

HORSEMAN, NELSON D. PROLACTIN MECHANISMS REGULATING CROP MILK PROTEIN SYNTHESIS (PCM-8118861); 24 MONTHS \$95,000

WARING, GAIL L. DEVELOPMENTAL REGULATION OF DROSOPHILA CHORIOGENESIS (PCM-8203171); 12 MONTHS \$60,000

MEDICAL COLLEGE OF WISCONSIN

HYDE, JAMES S. MULTIPROBE STUDIES OF MELANIN (PCM-8118976); 12 MONTHS \$66,000

GIROTTI, ALBERT W. CELL MEMBRANE DAMAGE BY PHOTOACTIVATED TETRAPYRROLES (PCM-8119286); 12 MONTHS \$52,000

UNIVERSITY OF WISCONSIN SYSTEM OFFICE

KAHAN, LAWRENCE. MONOCLONAL ANTIBODIES AS PROBES OF EUKARYOTE RIBOSOMAL STRUCTURE (PCM-8004597 A02); 12 MONTHS \$38,000

UNIVERSITY OF WISCONSIN-MADISON-MEDICAL SCHOOL

DAHLBERG, JAMES E. AND LUND, ELSEBET. STRUCTURE, FUNCTION AND GENE ORGANIZATION OF SMALL RNAs OF E. COLI (PCM-7707357 A04); 12 MONTHS \$74,999

HOKIN, LOWELL E. BIOSYNTHESIS AND PROPERTIES OF N.A.K. ATPASE (PCM-8120635); 12 MONTHS \$40,000

UNIVERSITY OF WISCONSIN-MADISON

SONNEBORN, DAVID R. DEVELOPMENTAL ANALYSES OF BLASTOCYSTELLA EMERSONII (PCM-7815334 A03); 12 MONTHS \$75,000

ADLER, JULIUS. MOLECULAR BIOLOGY OF CHEMOSENSING IN BACTERIAL CHEMOTAXIS (PCM-7826573 A03); 12 MONTHS \$53,000

BROCK, THOMAS D. GLIDING MOTILITY IN PROCARYOTIC CELLS (PCM-7904913 A03); 24 MONTHS \$95,266

GERLOFF, GERALD C. EFFICIENCY IN PHOSPHORUS UPTAKE AND DISTRIBUTION BY PLANTS (PCM-7909808 A02); 12 MONTHS \$46,200

NOMURA, MASAYASU. STRUCTURE, FUNCTION AND ASSEMBLY OF RIBOSOMES (PCM-7910616 A03); 12 MONTHS \$100,900

O'LEARY, MARION H. HEAVY-ATOM ISOTOPE EFFECTS IN BIOCHEMICAL SYSTEMS (PCM-7922697 A03); 12 MONTHS \$36,000

WELLS, ROBERT D. STUDIES WITH DEFINED DEOXYRIBONUCLEIC ACIDS (PCM-8002622 A01); 12 MONTHS \$68,000

QUAIL, PETER H. AND NEWCOMB, ELDON H. LIGHT-REGULATED PLANT DEVELOPMENT: MODE OF ACTION AND SUBCELLULAR LOCALIZATION OF PHYTOCHROME (PCM-8003792 A03); 12 MONTHS \$72,000

EVERT, R. T. LEAF STRUCTURE IN RELATION TO SOLUTE TRANSPORT AND PHLOEM LOADING (PCM-8003855 A02); 12 MONTHS \$55,000

CROXDALE, JUDITH. ENZYMES AND METABOLITES OF CARBOHYDRATE OXIDATION WITHIN VEGETATIVE HEBE SHOOT APICES (PCM-8010957 A02); 12 MONTHS \$41,188

SEQUEIRA, LUIS. RECOGNITION IN HOST-PARASITE INTERACTIONS (PCM-8017713 A01); 12 MONTHS \$65,000

GANETZKY, BARRY S. GENETICS OF SEGREGATION DISTORTION IN DROSOPHILA (PCM-8102325 A01); 12 MONTHS \$70,000

ENGELS, WILLIAM R. HYBRID DYSGENESIS AND THE P FACTOR IN DROSOPHILA (PCM-8104332); 24 MONTHS \$110,000

HOWE, MARTHA M. THE ANALYSIS OF GENE FUNCTION AND REGULATION IN BACTERIOPHAGE MU (PCM-8109769 A01); 12 MONTHS \$75,000

BITTAR, E. EDWARD. CYCLIC NUCLEOTIDES, PHOSPHORYLATION AND SODIUM TRANSPORT IN SINGLE MUSCLE FIBERS (PCM-8112761); 24 MONTHS \$90,595

BURRIS, R. H. BIOLOGICAL FIXATION OF NITROGEN (PCM-8115077); 12 MONTHS \$47,787

RECORD, M. THOMAS. ELECTROSTATIC COMPONENT OF PROTEIN-NUCLEIC ACID INTERACTIONS (PCM-8120031); 12 MONTHS \$68,000

LUDDEN, PAUL W. ENZYMES INVOLVED IN REGULATION OF NITROGENASE ACTIVITY (PCM-8110864 A01); 12 MONTHS \$50,000

GREEN, DAVID E. ON THE ENZYMIC MECHANISMS OF TRANSMEMBRANE TRANSPORT (PCM-8200694); 12 MONTHS \$59,760

CLELAND, WILLIAM W. STEREOCHEMISTRY OF THE MAGNESIUM-ATP COMPLEX AS A SUBSTRATE (PCM-8200705); 12 MONTHS \$36,000

SPRITZ, RICHARD A. ACQUISITION OF AN AUTOCLAVE (PCM-8200842); 12 MONTHS \$30,000

BRILL, WINSTON J. NODULATION BY RHIZOBIUM (PCM-8203759); 24 MONTHS \$59,999

CHEN, CHONG-MAW. ON THE MECHANISM OF CYTOKININ IN CELL DIVISION AND DIFFERENTIATION (PCM-8204717); 24 MONTHS \$90,000

FALLON, JOHN F; AN EXPERIMENTAL ANALYSIS OF CELLULAR CHARACTERISTICS DURING LIMB DEVELOPMENT (PCM-8205368); 12 MONTHS \$55,000

SELMAN, BRUCE R; ENERGY CONSERVATION IN HIGHER PLANT CHLOROPLASTS (PCM-8206775); 12 MONTHS \$35,000

NELSON, OLIVER E; CONTROLLING ELEMENTS IN MAIZE: AN EXAMINATION OF THEIR EFFECT ON GENE FUNCTION (PCM-8207987); 12 MONTHS \$57,748

MARTIN, THOMAS F; PEPTIDE HORMONE REGULATION OF PROTEIN PHOSPHORYLATION (PCM-8208920); 12 MONTHS \$68,000

KERMICIE, JERRY L; COMPONENTS OF TISSUE-SPECIFIC R ALLELES IN MAIZE (PCM-8209036); 12 MONTHS \$33,679

UNIVERSITY OF WISCONSIN-MILWAUKEE

VANSELOW, RALF; ACQUISITION OF 250 MHZ FOURIER TRANSFORM MULTINUCLEAR NMR SPECTROMETER (PCM-8115779); 12 MONTHS \$80,000

WYOMING

UNIVERSITY OF WYOMING

GERN, WILLIAM A; INDOLEAMINE METABOLISM IN PHOTORECEPTORS (PCM-7923143 A02); 12 MONTHS \$33,500

HIGGINS, NORMAN P; BIOCHEMICAL STUDIES OF BACTERIOPHAGE MU TRANSDUCTION (PCM-8004689 A02); 12 MONTHS \$35,000

MIDDAUGH, CHARLES R; ABNORMAL PROTEIN SOLUBILITY (PCM-8011193 A02); 12 MONTHS \$30,861

JOHNSON, JERRY D; IN VIVO EXPRESSION OF MODIFIED YEAST RNA GENES (PCM-8021366 A01); \$5,963

JOHNSON, JERRY D; IN VIVO EXPRESSION OF MODIFIED YEAST RNA GENES (PCM-8021366 A02); 12 MONTHS \$53,619

MOORE, THOMAS S; PHOSPHOLIPIDS AND MITOCHONDRIAL BIOGENESIS (PCM-8025006); 24 MONTHS \$90,000

ENVIRONMENTAL BIOLOGY

ALABAMA

UNIVERSITY OF ALABAMA

HAYNES, ROBERT R; SYSTEMATICS OF POTAMOGETON (POTAMOGETONACEAE) (BSR-8021387 A01); 12 MONTHS \$25,206

ALASKA

UNIVERSITY OF ALASKA FAIRBANKS CAMPUS-INSTITUTE OF MARINE SCIENCE

REICHARDT, PAUL B, AND CHAPIN, F STUART; ANTIHERBIVORE METABOLITES OF ALASKAN BIRCH, ALDER, AND BALSAM POPLAR (DEB-8207170); 12 MONTHS \$60,000

UNIVERSITY OF ALASKA FAIRBANKS CAMPUS

VAN CLEVE, KEITH; FOREST FLOOR ORGANIC MATTER QUALITY AS A CONTROL OF NITROGEN AND PHOSPHORUS SUPPLY TO FOREST PLANTS IN THE ALASKA TAIGA (DEB-8117129); 12 MONTHS \$24,239

CHAPIN, F STUART; THE RELATIONSHIP OF RELATIVE GROWTH RATE OF PLANTS TO ECOSYSTEM PROCESSES IN ALASKAN TUNDRA (BSR-8205344); 12 MONTHS \$157,549

ARIZONA

ARIZONA STATE UNIVERSITY

NASH, THOMAS H; ECOLOGY OF COASTAL LICHENS IN SOUTHERN CALIFORNIA (BSR-7921953 A02); 12 MONTHS \$40,152

FISHER, STUART G; RECOVERY PROCESSES OF DESERT STREAMS (DEB-8004145 A02); 12 MONTHS \$71,625

WALSBERG, GLENN E; THERMAL ECOLOGY OF THE PHAINOPEPLA (BSR-8004266 A02); 12 MONTHS \$24,600

SZAREK, STANLEY R; ECOPHYSIOLOGICAL BASIS FOR HABITAT SELECTION OF DESERT EPHEMERALS (DEB-8023661 A01); 12 MONTHS \$23,500

COLLINS, JAMES P; EVOLUTION OF MORPHOLOGICAL VARIATION (DEB-8109380 A01); 12 MONTHS \$32,983

FAETH, STANLEY H; ORGANIZATION OF PHYTOPHAGOUS INSECT COMMUNITIES ON OAK HOST PLANTS (DEB-8118032); 12 MONTHS \$35,000

MUSEUM OF NORTHERN ARIZONA

WHITHAM, THOMAS G, AND ZUCKER, WILLIAM V; HOST VARIATION AND HOST SELECTION IN A COEVOLVED PLANT-PARASITE SYSTEM (BSR-8005602 A02); 10 MONTHS \$14,218

WHITHAM, THOMAS G; HOST VARIATION AND HOST SELECTION IN A COEVOLVED PLANT-PARASITE SYSTEM (BSR-8005602 A03); 12 MONTHS \$16,498

NORTHERN ARIZONA UNIVERSITY

PRITE, PETER W; INTERACTIONS AMONG THREE TROPHIC LEVELS (DEB-8201754 A01); 12 MONTHS \$40,906

JOHNSON, CLARENCE D; SYSTEMATICS OF THE GENUS ACANTHOSCELIDIS (BRUCHIDAE) (DEB-8109995); 12 MONTHS \$30,238

UNIVERSITY OF ARIZONA

BROWN, JAMES H; COLLABORATIVE RESEARCH ON AN EXPERIMENTAL ANALYSIS OF GRANTVORY IN A DESERT ECOSYSTEM (DEB-8021535 A01); 12 MONTHS \$104,417

ROSENZWEIG, MICHAEL L; EXPLOITIVE COMPETITION, INTERFERENCE COMPETITION AND OPTIMAL FORAGING (BSR-8104487 A01); 12 MONTHS \$41,107

MICHOD, RICHARD E; THEORETICAL POPULATION BIOLOGY OF SOCIAL BEHAVIOR (DEB-8118248); 36 MONTHS \$79,000

ROSKOSKI, JOANN P; UNIVERSITY/INDUSTRY COOPERATIVE RESEARCH: ESTABLISHMENT OF WOODY LEGUMES ON DISTURBED TROPICAL LANDS (DEB-8118419*); 24 MONTHS \$25,000

LINDSAY, EVERETT H; FOSSIL SMALL MAMMALS OF SOUTHERN ASIA AND AFRICA (DEB-8120988); 24 MONTHS \$98,073

VLECK, DAVID; OSMOREGULATION IN REPTILES (DEB-8202880); 24 MONTHS \$34,999

HEED, WILLIAM B, KIRCHER, HENRY W, AND FOGLEMAN, JAMES C; ECOLOGY AND GENETICS OF CACTOPHILIC DROSOPHILA AND THEIR ASSOCIATED MICROFLORA (DEB-8207056); 12 MONTHS \$77,445

ARKANSAS

UNIVERSITY OF ARKANSAS FAYETTEVILLE

SMITH, EDWIN B; COLLABORATIVE RESEARCH ON A MONOGRAPHIC STUDY OF THE GENUS CORBOPIS (BSR-8017112 A02); 12 MONTHS \$22,704

CALIFORNIA

AMERICAN SOCIETY OF ZOOLOGISTS

SCHRAM, FREDERICK R; SYMPOSIUM ON PHYLOGENY WITHIN CRUSTACEA, DALLAS, TEXAS, 27 DECEMBER 1981 (BSR-8107870); 12 MONTHS \$9,138

POUGH, F H; SYMPOSIUM ON ADAPTIVE RADIATION WITHIN A HIGHLY SPECIALIZED SYSTEM: THE DIVERSITY OF FEEDING MECHANISMS OF SNAKES (DEB-8107917); 12 MONTHS \$7,163

DENNY, MARK W; SYMPOSIUM ON BIOMECHANICS, LOUISVILLE, KENTUCKY, IN DECEMBER 27-30, 1982 (DEB-8202875); 12 MONTHS \$8,000

CALIFORNIA ACADEMY OF SCIENCES

BREEDLOVE, DENNIS E, AND ALMEDA, FRANK; SUPPORT FOR BOTANICAL SYSTEMATIC COLLECTIONS (BSR-7927070 A02); 12 MONTHS \$50,816

IWAMOTO, TOMIO, AND ESCHMEYER, WILLIAM N; SUPPORT FOR THE COLLECTION OF FISHES AT THE CALIFORNIA ACADEMY OF SCIENCES (DEB-8013013 A02); 12 MONTHS \$59,847

DREWES, ROBERT C; SUPPORT FOR THE SYSTEMATIC COLLECTIONS OF THE DEPARTMENT OF HERPETOLOGY (BSR-8014250 A02); 12 MONTHS \$59,883

KAVANAUGH, DAVID H; SUPPORT FOR THE SYSTEMATIC COLLECTIONS OF THE DEPARTMENT OF ENTOMOLOGY (BSR-8015518 A02); 12 MONTHS \$70,000

LEE, WELTON L, AND DUNN, DAPHNE F; ACQUISITION OF RESEARCH EQUIPMENT - PHOTOMICROSCOPE (DEB-8102239); 12 MONTHS \$35,723

LEE, WELTON L; SUPPORT OF A MAJOR SYSTEMATIC COLLECTION OF RECENT MOLLUSKS (DEB-8121511); 12 MONTHS \$50,000

CALIFORNIA INSTITUTE OF TECHNOLOGY

LEWIS, EDWARD B; SUPPORT OF THE COLLECTION OF MUTANT TYPES OF DROSOPHILA MELANOGASTER (BSR-8021760 A01); 12 MONTHS \$80,000

CALIFORNIA STATE POLYTECHNIC UNIV, POMONA

BASKIN, JONATHAN N; CURATION OF FISHES OF THE ORINOCO RIVER, VENEZUELA (DEB-8022343 A01); \$3,799

CALIFORNIA STATE UNIVERSITY, CHICO

KISTNER, DAVID H; A SPECIES REVISION OF THE ALEOCHARINAE (BSR-7905088 A02); 12 MONTHS \$27,100

OCCIDENTAL COLLEGE

MORTON, MARTIN L; THERMAL DYNAMICS OF INCUBATION AT LOW AND HIGH ALTITUDE (DEB-8106951); 36 MONTHS \$10,000

KEELEY, JON E; CRASSULACEAN ACID METABOLISM IN SUBMERGED AQUATIC PLANTS (DEB-8206887); 24 MONTHS \$95,000

POMONA COLLEGE

THORNE, ROBERT F; CARE OF THE SYSTEMATIC COLLECTIONS OF THE RSA-POM HERBARIUM (DEB-8120182); 12 MONTHS \$112,503

SAN DIEGO SOCIETY OF NATURAL HISTORY

PREGILL, GREGORY K; FOSSIL VERTEBRATES FROM THE LEEWARD ISLANDS, WEST INDIES AND THEIR ZOOGEOGRAPHICAL SIGNIFICANCE (DEB-8207347); 24 MONTHS \$65,554

SAN DIEGO STATE UNIVERSITY

OECHEL, WALTER C; MECHANISMS CONTROLLING RESOURCE USE, COMMUNITY ORGANIZATION, AND SUCCESSION IN FIRE DOMINATED CHAPARRAL ECOSYSTEMS (BSR-8025977 A01); 12 MONTHS \$229,056

SAN FRANCISCO STATE UNIVERSITY

BOWEN, SARANE T; ECOLOGICAL GENETICS OF ARTEMIA (DEB-8202260); 24 MONTHS \$64,995

STANFORD UNIVERSITY

ROUGHGARDEN, JONATHAN; COEVOLUTION IN SIMPLE COMPETITION COMMUNITIES (DEB-7922124 A02); 12 MONTHS \$45,000

KARLIN, SAMUEL; TOPICS IN ANALYSIS, TOTAL POSITIVITY AND RELATED MATHEMATICAL MODELS IN BIOLOGY (MCS-7924310 A02*); 12 MONTHS \$19,000

WATT, WARD B; EVOLUTIONARY ADAPTATION AT SPECIFIC GENE LOCI (DEB-8011129 A02); 12 MONTHS \$60,000

MOONEY, HAROLD A; LIMITATIONS TO ENERGY CAPTURE IN NATURAL ECOSYSTEMS (BSR-8108769 A01); 12 MONTHS \$180,000

LEDERBERG, ESTHER M; MAINTENANCE OF THE PLASMID REFERENCE CENTER (PCM-8105434 A02*); 12 MONTHS \$40,000

ROUGHGARDEN, JONATHAN, AND RUMMEL, JOHN D; DOCTORAL DISSERTATION RESEARCH IN ECOLOGY (DEB-8203522); 18 MONTHS \$3,417

- PITTENDRIGH, COLIN S. REPLACEMENT OF HOPKINS MARINE STATION SEAWATER SYSTEM (DEB-8208660*); 12 MONTHS \$5,000
- UNIVERSITY OF CALIFORNIA, BERKELEY
- WAKE, DAVID B. ADAPTIVE RADIATION OF PLETHODONTID SALAMANDERS IN THE NEW WORLD TROPICS AND WESTERN NORTH AMERICA (DEB-7803008 A04); 12 MONTHS \$66,500
- MCCULLOUGH, DALE R. DEER POPULATION-VEGETATION INTERACTIONS ON THE GEORGE RESERVE (DEB-7911534 A02); 12 MONTHS \$33,654
- JOHNSON, NED K. GENETIC-PHENETIC CORRELATES OF AVIAN DIVERSITY (BSR-7920694 A02); 12 MONTHS \$30,200
- JOHNSON, NED K. OPERATIONAL SUPPORT FOR THE MUSEUM OF VERTEBRATE ZOOLOGY (BSR-7924036 A02); 12 MONTHS \$63,000
- WAKE, MARVALEE H. COMPARATIVE MORPHOLOGY AND SYSTEMATICS OF CAECILIANS (DEB-8005905 A02); 12 MONTHS \$39,161
- COLLINS, O'NEIL R. MYXOMYCETE BIOSYSTEMATICS (BSR-8005999 A02); 12 MONTHS \$44,057
- DUNCAN, THOMAS O. SYSTEMATIC AND EVOLUTIONARY STUDIES OF *RANUNCULUS* AND RELATED GENERA (DEB-8020816 A01); 12 MONTHS \$27,453
- HICKMAN, CAROLE S. SYSTEMATICS OF TROCHACEA (DEB-8020992 A01); 12 MONTHS \$33,993
- PITELKA, FRANK A. ECOLOGY AND EVOLUTION OF SOCIAL BEHAVIOR (DEB-8109128 A01); 12 MONTHS \$33,000
- PATTON, JAMES L. SYSTEMATICS OF THOMOMYS (BSR-8109677 A01); 12 MONTHS \$52,498
- HAGEN, K. S. DOCTORAL DISSERTATION RESEARCH IN POPULATION BIOLOGY (DEB-8111530*); 12 MONTHS \$4,400
- WILSON, ALLAN C. SYSTEMATIC BIOLOGY OF PRIMATES (DEB-8112412 A01); \$76,000
- PATTON, JAMES L. AND LIDICKER, WILLIAM Z. SUPPORT FOR ELECTRONIC DATA PROCESSING OF THE MAMMAL COLLECTION OF THE MUSEUM OF VERTEBRATE ZOOLOGY (BSR-8114923 A01); 12 MONTHS \$19,275
- WEST, JOHN A. AND ZUPAN, JOHN R. DOCTORAL DISSERTATION RESEARCH IN POPULATION BIOLOGY (DEB-8116000*); 24 MONTHS \$6,300
- MORTIMER, ROBERT K. SUPPORT OF THE YEAST GENETIC STOCK CENTER (DEB-8117374); 12 MONTHS \$44,561
- CLEMENS, WILLIAM A. THE CRETACEOUS-TERTIARY TRANSITION FROM A TERRESTRIAL VIEWPOINT (DEB-8119217*); 12 MONTHS \$28,897
- ORNDUFF, ROBERT. DOCTORAL DISSERTATION RESEARCH IN SYSTEMATIC BIOLOGY (DEB-8119218); 12 MONTHS \$5,000
- WAKE, DAVID B. AND BUSACK, STEPHEN D. DOCTORAL DISSERTATION RESEARCH IN SYSTEMATIC BIOLOGY (DEB-8120868*); 24 MONTHS \$5,950
- PATTON, JAMES L. AND ROGERS, DUKE S. DOCTORAL DISSERTATION RESEARCH IN SYSTEMATIC BIOLOGY (DEB-8202270*); 24 MONTHS \$7,000
- ROBICHAUX, ROBERT H. WATER RELATIONS OF THE HAWAIIAN SILVERWORD ALLIANCE COMPOSITAE (DEB-8206411*); 24 MONTHS \$65,000
- HAND, CADET, PITELKA, FRANK A. AND CLARK, WALLIS H. BODEGA MARINE LABORATORY EQUIPMENT AND FACILITIES SUPPORT (DEB-8209731*); 24 MONTHS \$80,000
- UNIVERSITY OF CALIFORNIA, DAVIS
- ALLARD, ROBERT W. GENETICS OF PLANT POPULATIONS (BSR-7802046 A04); 12 MONTHS \$57,000
- GOLDMAN, CHARLES R. PREDATION AND TROPHIC RELATIONSHIPS IN LAKE TAHOE (BSR-7916221 A02); 12 MONTHS \$133,496
- PEARCY, ROBERT W. PHOTOSYNTHETIC ADAPTATION IN THE C4 HAWAIIAN EUPHORBIAS (DEB-7921826 A02); 12 MONTHS \$44,000
- RICHMOND, PETER J. THE LIMNOLOGY OF LAKE TITICACA (DEB-7921933 A02); 12 MONTHS \$81,097
- SNOW, SIDNEY R. EVOLUTION OF A DUPPLICATE GENE IN DIPLOID SPECIES OF CLARKIA (DEB-7922196 A02); 12 MONTHS \$36,619
- GOLDMAN, CHARLES R. A COMPARATIVE STUDY OF THE NITROGEN METABOLISM OF PHYTOPLANKTON AND PERIPHYTON COMMUNITIES IN OLIGOTROPHIC LAKES (BSR-8019918 A01); 12 MONTHS \$131,326
- GOLDMAN, CHARLES R. A COMPARATIVE STUDY OF THE NITROGEN METABOLISM OF PHYTOPLANKTON AND PERIPHYTON COMMUNITIES IN OLIGOTROPHIC LAKES (BSR-8019918 A02); \$4,000
- WEATHERS, WESLEY W. AVIAN ECOLOGICAL ENERGETICS (DEB-8022765 A01); 12 MONTHS \$38,500
- PHAFF, HERMAN J. A COLLABORATIVE RESEARCH ON THE YEAST FLORA ASSOCIATED WITH *OPUNTIA* CACTI (BSR-8108898 A01); 12 MONTHS \$39,000
- WELLS, KENNETH. INCOMPATIBILITY MECHANISMS IN SAPROBIC HETEROBASIDIOMYCETES (DEB-8111644); 12 MONTHS \$26,445
- GILLESPIE, JOHN H. STOCHASTIC FACTORS IN THE GENETICS OF NATURAL POPULATIONS (DEB-8113411); 24 MONTHS \$40,000
- SCOTT, JENNER, THOMAS W. SPECIES DIVERSITY AND ABUNDANCE IN INSULAR SYSTEMS (DEB-8113970*); 12 MONTHS \$33,768
- SEIBER, JAMES N. COLLABORATIVE RESEARCH ON ECOLOGICAL CHEMISTRY OF CARDENOLIDES (DEB-8119391); 12 MONTHS \$24,996
- WARD, PHILIP S. SYSTEMATIC RELATIONSHIPS AND POPULATION STRUCTURE IN PSEUDOMYRMECINE ANTS (BSR-8204230*); 24 MONTHS \$43,204
- BAUMANN, PAUL. EVOLUTIONARY RELATIONSHIPS AMONG NON-FERMENTATIVE MARINE BACTERIA (BSR-8205338*); 24 MONTHS \$90,194
- UNIVERSITY OF CALIFORNIA, IRVINE
- MACMILLEN, RICHARD E. WATER AND ENERGY REGULATION IN HETEROMYID RODENTS (DEB-7923808 A02); 12 MONTHS \$48,059
- CARPENTER, F. LYNN. ENERGETIC AND RESOURCE CONSTRAINTS ON OPTIMAL TERRITORY SIZE (DEB-8022575 A01); 12 MONTHS \$23,179
- BENNETT, ALBERT F. AND JOHN-ALDER, HENRY B. DOCTORAL DISSERTATION RESEARCH IN POPULATION BIOLOGY (DEB-8119797*); 24 MONTHS \$5,115
- ATSATT, PETER R. HOST SPECIFICITY AND HOST SWITCHING IN PHYTOPHAGOUS INSECTS (DEB-8203520*); 24 MONTHS \$66,000
- UNIVERSITY OF CALIFORNIA, LOS ANGELES
- SCHOPF, J. WILLIAM. PRECAMBRIAN PALEOBIOLOGY (DEB-7921777 A02); 12 MONTHS \$56,990
- LOEBLICH, HELEN T. AND LOEBLICH, ALFRED R. SUPRAGENERIC RECLASSIFICATION OF THE FORAMINIFERIDA (PROTOZOA) (DEB-8008085 A01*); 12 MONTHS \$15,008
- BARTHOLOMEW, GEORGE A. ECOLOGICAL PHYSIOLOGY AND BEHAVIOR (BSR-8103513 A01); 12 MONTHS \$56,000
- UNIVERSITY OF CALIFORNIA, RIVERSIDE
- PINTO, JOHN D. SYSTEMATICS OF NORTH AMERICAN EPICAUTA (MELOIDAE: COLEOPTERA) (DEB-7915307 A02); 12 MONTHS \$25,617
- JARRELL, WESLEY M. NITROGEN FIXATION IN LEGUME-DOMINATED DESERT ECOSYSTEMS (DEB-7921971 A02); 12 MONTHS \$239,028
- FRENCH, ALAN R. THE ENERGETICS AND TIMING OF MAMMALIAN HIBERNATION (BSR-8003513 A01*); 12 MONTHS \$31,951
- PRICE, MARY V. RESOURCE PARTITIONING BY COEXISTING DESERT RODENT SPECIES (BSR-8022164 A02); 12 MONTHS \$48,583
- CHAPPELL, MARC A. PHYSIOLOGICAL CORRELATES OF HEMOGLOBIN POLYMORPHISMS (BSR-8202708*); 24 MONTHS \$80,000
- UNIVERSITY OF CALIFORNIA, SAN DIEGO-SCRIPPS INSTITUTION OF OCEANOGRAPHY
- EPPLEY, RICHARD W. ACQUISITION OF A 15N EMISSION SPECTROMETER FOR PLANKTON RATE PROCESS MEASUREMENTS IN THE OCEAN (DEB-8207949*); 12 MONTHS \$5,000
- KOORYMAN, GERALD L. AND WHITE, FRED N. REHABILITATION OF MARINE ANIMAL RESEARCH POOLS (DEB-8208668*); 12 MONTHS \$10,000
- UNIVERSITY OF CALIFORNIA, SAN DIEGO
- BRADBURY, JACK W. EVOLUTION OF COOPERATIVE BEHAVIOR (DEB-8001165 A02*); 12 MONTHS \$23,179
- RIEDEL, WILLIAM R. QUANTIFICATION OF MORPHOLOGICAL CHANGE IN EVOLVING EOCENE AND OLIGOCENE RADIOLARIANS (DEB-8206368*); 24 MONTHS \$85,097
- WOODRUFF, DAVID S. COLLABORATIVE RESEARCH ON VARIATION, ECOLOGY AND EVOLUTION OF *CERION* (DEB-8207540*); 24 MONTHS \$95,000
- UNIVERSITY OF CALIFORNIA, SANTA BARBARA
- MURDOCH, WILLIAM W. THE DYNAMICAL STRUCTURE OF ECOLOGICAL COMMUNITIES (DEB-7922131 A02); 12 MONTHS \$72,126
- WARNER, ROBERT. BEHAVIORAL AND POPULATION ECOLOGY OF CORAL REEF FISHES (BSR-8109133 A01); 12 MONTHS \$48,000
- UNIVERSITY OF CALIFORNIA, SANTA CRUZ
- LANGENHEIM, JEAN H. COMPARATIVE SYSTEMATIC AND CHEMICAL STUDIES OF THE AMBER PRODUCING GENERA HYMENAEA AND COIPAIFA (DEB-7810645 A04); 12 MONTHS \$55,105
- FOX, LAUREL R. FOOD QUALITY AND NATURAL ENEMIES MODIFYING HERBIVORE LEVELS ON EUCALYPTUS (BSR-8022574 A01); 12 MONTHS \$46,039
- LE BOEUF, BURNEY J. AND ORTIZ, C. LEO. BIOLOGICAL STUDIES OF NORTHERN ELEPHANT SEALS (BSR-8117024); 12 MONTHS \$45,000
- UNIVERSITY OF SOUTHERN CALIFORNIA
- SAVAGE, JAY M. AND HAYES, MARC P. DOCTORAL DISSERTATION RESEARCH IN POPULATION BIOLOGY (DEB-8200275*); 6 MONTHS \$4,026

COLORADO

COLORADO STATE UNIVERSITY

- SMITH, FREEMAN M. PREDICTION OF GRAZINGLAND PRODUCTIVITY UNDER CLIMATIC VARIATIONS (DEB-78-243 A03*); 6 MONTHS \$31,364
- PARTON, WILLIAM J. ADDITIONS, LOSSES AND TRANSFORMATIONS OF NITROGEN IN GRASSLANDS ECOSYSTEMS (DEB-7906009 A03); 12 MONTHS \$237,362
- PACKARD, GARY C. MORPHOLOGY, PHYSIOLOGY, AND EVOLUTION OF THE CLEIDOC ECG (DEB-79-246 A02); 12 MONTHS \$30,276
- COLEMAN, DAVID C. SOIL, ROOT, AND MICROORGANISM INTERACTIONS AFFECTING NUTRIENT TRANSFORMATIONS IN SEMI-ARID GRASSLANDS (BSR-8001193 A02); 12 MONTHS \$343,335
- DETTLING, JAMES K. PLANT-ANIMAL INTERACTIONS: THE ROLE OF ABOVE AND BELOWGROUND HERBIVORES IN NORTH AMERICAN GRASSLAND ECOSYSTEMS (DEB-8022380 A01); 12 MONTHS \$207,061
- COLE, C. VERNON. ORGANIC MATTER AND NUTRIENT CYCLING IN SEMI-ARID AGROECOSYSTEMS (BSR-8105281 A01); 12 MONTHS \$435,399
- LAUENROTH, WILLIAM K. PROCESSES AND RESPONSES OF A SHORT-GRASS STEPPE ECOSYSTEM IN COLORADO (DEB-8114822); 12 MONTHS \$252,338
- ELLIS, JAMES E. AND SWIFT, DAVID M. THE ECOLOGY OF SUBSISTENCE PASTORALISM (DEB-8206864*); 12 MONTHS \$281,700
- PARTON, WILLIAM J. FIRE IN TALLGRASS PRAIRIE (DEB-8207015); 24 MONTHS \$196,309
- ROCKY MOUNTAIN BIOLOGICAL LABORATORY
- INOUE, DAVID W. AND TAYLOR, ORLEY R. PLANT POPULATION DYNAMICS (DEB-8108387); 12 MONTHS \$35,000

UNIVERSITY OF COLORADO AT BOULDER

PICKETT-HEAPS, JEREMY D; CELL DIVISION, MORPHOGENESIS AND PHYLOGENY IN DIATOMS AND GREEN ALGAE (DEB-7922200 A02); 12 MONTHS \$55,718

BEKOFF, MARC; SOCIAL ECOLOGY OF FREE-RANGING COYOTES (BNS-7923463 A02*); 12 MONTHS \$18,742

LEWIS, WILLIAM M; ECOSYSTEM ANALYSIS OF LAKE VALENCIA, VENEZUELA (DEB-8003883 A02); 12 MONTHS \$10,755

LINHART, YAN B; COLLABORATIVE RESEARCH ON SECONDARY SUCCESSION IN THE TROPICS (DEB-8011023 A01); 12 MONTHS \$40,240

LEWIS, WILLIAM M; NUTRIENT METABOLISM AND MASS BALANCE OF THE ORINOCO RIVER (DEB-8116725); 24 MONTHS \$249,535

CONNECTICUT

UNIVERSITY OF BRIDGEPORT

GALTON, PETER M; SYSTEMATICS OF PLATOSAURID DINOSAURS (DEB-8101969); 24 MONTHS \$52,701

UNIVERSITY OF CONNECTICUT

BRUSH, ALAN H; A MOLECULAR BASIS FOR AVIAN MORPHOLOGY: EPIDERMAL KERATIN STRUCTURES (BSR-8016544 A01); 12 MONTHS \$47,000

SCHULTZ, R JACK; CLONAL COMPETITION AND ADAPTATION (DEB-8021265 A01); 12 MONTHS \$31,060

CREPET, WILLIAM L; INVESTIGATIONS OF FOSSILIZED ANGIOSPERM FLOWERS (DEB-8110217); 12 MONTHS \$59,163

SLATER, JAMES A; A REVISION OF THE SEED BUGS OF THE GENUS OZOPHORA (HEMIPTERA: LYGAEDIDAE) (DEB-8110476); 24 MONTHS \$75,000

ANDERSON, GREGORY J; SYSTEMATICS AND REPRODUCTIVE BIOLOGY OF SOLANUM (DEB-8207125); 12 MONTHS \$40,671

YALE UNIVERSITY-PEABODY MUSEUM OF NATURAL HISTORY

SIBLEY, CHARLES G; THE PHYLOGENY OF THE PRIMATES AS INDICATED BY DNA-DNA HYBRIDIZATION (BNS-8205774*); 12 MONTHS \$10,000

YALE UNIVERSITY-SCHOOL OF MEDICINE

BACHMANN, BARBARA J; MAINTENANCE OF ESCHERICHIA COLI K-12 STOCK CULTURE COLLECTION (DEB-7920532 A02); 12 MONTHS \$134,581

YALE UNIVERSITY

THOMSON, KEITH S; SYSTEMATICS OF TRIASSIC AND EARLY JURASSIC SEMIONOTIDAE OF EASTERN NORTH AMERICA (BSR-7921746 A02); 12 MONTHS \$56,198

SIBLEY, CHARLES G; A COMPARATIVE STUDY OF THE GENETIC MATERIAL (DNA) OF BIRDS (DEB-7926746 A01); 12 MONTHS \$70,000

HANDEL, STEVEN N; POLLEN FLOW IN EXPERIMENTAL AND NATURAL PLANT POPULATIONS (BSR-8106834 A01); 12 MONTHS \$47,000

POWELL, JEFFREY R; DOCTORAL DISSERTATION RESEARCH IN POPULATION BIOLOGY (DEB-8109816); 24 MONTHS \$4,500

BORMANN, F HERBERT; COLLABORATIVE RESEARCH ON HYDROLOGIC NUTRIENT CYCLE INTER ACTION IN SMALL UNDISTURBED AND MAN-MANIPULATED ECOSYSTEMS (BSR-8111551 A01); 12 MONTHS \$159,958

THOMSON, KEITH S; DOCTORAL DISSERTATION RESEARCH IN SYSTEMATIC BIOLOGY (DEB-8111602); 24 MONTHS \$10,385

HARRISON, RICHARD G; HYBRIDIZATION AND GENE EXCHANGE IN NORTH AMERICAN GRILLUS (BSR-8111603 A01); 12 MONTHS \$48,000

HARRISON, RICHARD G, AND HOWARD, DANIEL; DOCTORAL DISSERTATION RESEARCH IN SYSTEMATIC BIOLOGY (DEB-8113479); 12 MONTHS \$4,100

BUSS, LEO W; POPULATION BIOLOGY AND EVOLUTION OF CLONAL ORGANISMS: A SYMPOSIUM (OCE-8118729*); 12 MONTHS \$9,000

KNOWLTON, NANCY; THE ECOLOGY AND EVOLUTION OF AGGRESSIVE INTERACTIONS (DEB-8201173); 12 MONTHS \$25,000

OSTROM, JOHN H, AND ARCHIBALD, J DAVID; MODERNIZATION, REORGANIZATION AND CURATION OF THE FOSSIL VERTEBRATE COLLECTION: PHASE I (DEB-8201214); 24 MONTHS \$189,190

POWELL, JEFFREY R; SELECTION IN LABORATORY POPULATIONS OF DROSOPHILA (DEB-8203119); 24 MONTHS \$90,242

DELAWARE

UNIVERSITY OF DELAWARE

WOOD, THOMAS K; EVOLUTION OF MEMBRACID LIFE HISTORIES (BSR-8021398 A01); 12 MONTHS \$27,806

CORNELL, HOWARD V; DETERMINANTS OF THE RICHNESS-RANGE PATTERN (BSR-8023341 A01); 12 MONTHS \$20,321

WOOD, THOMAS K; INSECT SPECIATION AND HOST PLANT INTERACTION (DEB-8023086 A01); 12 MONTHS \$33,611

DISTRICT OF COLUMBIA

AMERICAN ASSOCIATION FOR ADVANCEMENT SCIENCE

BURNS, DAVID M; RISING ATMOSPHERE CARBON DIOXIDE AND PLANT PRODUCTIVITY: AN INTERNATIONAL CONFERENCE IN ATHENS, GEORGIA; MAY 23-28, 1982 (DEB-8206077); 12 MONTHS \$6,832

SMITHSONIAN INSTITUTION

CAIRNS, STEWART D; A SYSTEMATIC ANALYSIS OF THE STYLASTERINA (DEB-8102776*); 6 MONTHS \$19,573

KIESTER, A; LIFE HISTORY AND DEMOGRAPHY OF THYSANOPTERA (DEB-8216286); 13 MONTHS \$25,840

FLORIDA

FISHER, JACK B; STRUCTURAL STUDIES OF TROPICAL TREES (DEB-7914635 A03); \$8,990

FISHER, JACK B; STRUCTURAL STUDIES OF TROPICAL TREES (DEB-7914635 A02); 12 MONTHS \$24,450

FISHER, JACK B; STRUCTURAL STUDIES OF TROPICAL TREES (DEB-7914635 A03); \$8,990

FLORIDA DEPARTMENT OF AGRICULTURE

FAIRCHILD, G B, AND WILKERSON, RICHARD C; SYSTEMATICS OF NEOTROPICAL TABANIDAE (DEB-8211808); 12 MONTHS \$28,000

FLORIDA DEPARTMENT OF AGRICULTURE-FLORIDA DEPT OF AGRIC & CONSUMER SERVICES

DENMARK, HAROLD A; SUPPORT FOR COMPACTORS FOR THE FLORIDA STATE COLLECTION OF ARTHROPODS (DEB-8202362); 12 MONTHS \$70,745

FLORIDA STATE UNIVERSITY

TRAVIS, JOSEPH; SOURCES AND CONSEQUENCES OF GROWTH RATE VARIATION IN LARVAL ANURANS (DEB-8107783 A01); \$10,960

MENZEL, MARGARET Y; USE OF SYNAPTONEMAL COMPLEX SPREADS IN PLANT CYTOGENETICS AND BIOSYSTEMATICS (DEB-8118417); 12 MONTHS \$38,443

STRONG, DONALD R; ARTHROPOD COMMUNITY MANIPULATION ON ISLETS OF SPARTINA ALTERNIFLORA (DEB-8206356); 24 MONTHS \$80,092

MARIE SELBY BOTANICAL GARDENS

DODSON, CALAWAY H; PREPARATION OF THREE FLORULAS IN WESTERN ECUADOR (DEB-8119505); 12 MONTHS \$25,880

NEWFOUND HARBOR MARINE INSTITUTE

THOMAS, JAMES D; TAXONOMY AND ECOLOGY OF CORAL REEF AMPHIPODA OF THE TROPICAL ATLANTIC (DEB-8121128); 36 MONTHS \$41,930

TALL TIMBERS RESEARCH INC

PLATT, WILLIAM J, AND MEANS, D BRUCE; THE DYNAMICS OF FIRE-ADAPTED COMMUNITIES - LTREE (DEB-8012090 A02); 12 MONTHS \$25,332

UNIVERSITY OF FLORIDA-FLORIDA STATE MUSEUM

WILLIAMS, NORRIS H; POLLEN MORPHOLOGY AND SYSTEMATICS OF NEOTROPICAL GESNERIACEAE (DEB-8117253 A01); \$6,221

GILBERT, CARTER R; SUPPORT OF THE ICHTHYOLOGY COLLECTION AT THE FLORIDA STATE MUSEUM (DEB-8118168); 12 MONTHS \$36,568

WILLIAMS, NORRIS H; CHEMICAL ECOLOGY OF EUGLOSSINE BEES (DEB-8121941); 6 MONTHS \$4,188

UNIVERSITY OF FLORIDA

BROCKMANN, H J; THE EXAMINATION OF EVOLUTIONARILY STABLE STRATEGIES (BSR-8009334 A03); 12 MONTHS \$35,000

FEINSINGER, PETER; COLLABORATIVE RESEARCH ON SECONDARY SUCCESSION IN THE TROPICS (DEB-8011008 A01); 12 MONTHS \$74,685

EWEL, JOHN J; NATURAL SUCCESSION AS A MODEL FOR THE DESIGN OF NEW TROPICAL AGROECOSYSTEMS (BSR-8011136 A02); 12 MONTHS \$143,306

KIMBROUGH, JAMES W, AND CURRY, KENNETH J; PHYLOGENETIC RELATIONSHIPS OF OPERCULATE DISCOMYCETES (DEB-8019728 A02); 12 MONTHS \$28,315

WEBB, S DAVID, AND MAC FADDEN, BRUCE J; CURATORIAL IMPROVEMENT IN THE FOSSIL VERTEBRATE COLLECTIONS OF THE FLORIDA STATE MUSEUM (DEB-8022779 A02); 12 MONTHS \$79,440

MCNAB, BRIAN K; METABOLISM AND TEMPERATURE REGULATION IN SMALL MAMMALS (DEB-8104695 A01); 12 MONTHS \$45,000

GHOZL, HENRY L, EWEL, KATHERINE C, AND FISHER, RICHARD F; THE ROLE OF ROOT PRODUCTION AND TURNOVER IN THE CYCLING OF NITROGEN AND PHOSPHORUS IN SLASH PINE PLANTATION ECOSYSTEMS (BSR-8105718 A01); 12 MONTHS \$138,482

WILLIAMS, NORRIS H, AND WHITTEN, WM. MARK; DOCTORAL DISSERTATION RESEARCH IN ECOLOGY (DEB-8116538*); 24 MONTHS \$7,500

BROWER, LINCOLN P; COLLABORATIVE RESEARCH ON ECOLOGICAL CHEMISTRY OF CARDENOLIDES (DEB-8119382); 12 MONTHS \$25,000

PUTZ, FRANCIS E, AND STERN, WILLIAM L; VEGETATIVE ECOLOGY OF MALAYSIAN VINES (DEB-8200342); 24 MONTHS \$28,000

GILBERT, CARTER R, AND WILLIAMS, JEFFREY T; DOCTORAL DISSERTATION RESEARCH IN SYSTEMATIC BIOLOGY (DEB-8207313); 6 MONTHS \$2,865

UNIVERSITY OF MIAMI-SCHOOL OF MARINE & ATMOSPHERIC SCIENCES

FELL, JACK W; SYSTEMATICS AND LIFE HISTORIES OF BASIDIOMYCETOUS YEASTS (DEB-7912190 A02); 12 MONTHS \$58,453

VOSS, NANCY A; MONOGRAPHIC REVISION OF THE CEPHALOPODS OF THE FAMILY CRANCHIIDAE (DEB-8105193 A01); 12 MONTHS \$36,000

UNIVERSITY OF MIAMI

FLEMING, THEODORE H; ECOLOGICAL INTERACTIONS BETWEEN TROPICAL FRUGIVORES AND THEIR FOOD PLANTS (BSR-8104695 A01); 12 MONTHS \$43,432

WADDINGTON, KEITH D; EFFICIENCY OF A COMMUNICATION SYSTEM (DEB-8119280); 24 MONTHS \$41,000

LUYKX, PETER; CHROMOSOMAL AND GENIC VARIATION IN THE LOWER TERMITES (DEB-8119632*); 12 MONTHS \$40,773

GEORGIA

GEORGIA INSTITUTE OF TECHNOLOGY MAIN CAMPUS

BENKE, ARTHUR C; THE BIOLOGICAL BASIS OF PRODUCTION IN SUBTROPICAL BLACKWATER RIVERS (DEB-8104427 A02); 12 MONTHS \$215,649

UNIVERSITY OF GEORGIA

ANDERSON, WYATT W; ANALYSIS OF SELECTION ON DROSOPHILA PSEUDOBSCURA KARYOTYPES (DEB-7918493 A02); 12 MONTHS \$57,999

ATYEO, WARREN T; *THE SUPRASPECIFIC TAXA OF THE ANALGOIDEA (S.L.) (ACARINA: SARCOPTIFORMEA)* (DEB-7924299 A01); 12 MONTHS \$26,285

JORDAN, CARL F. AND UHL, C; *EFFECT OF CUTTING AND BURNING ON NUTRIENT DYNAMICS OF A TROPICAL RAIN FOREST (BSR-8212209 A03); 12 MONTHS \$322,945*

FULLER, MELVIN S; *SYSTEMATIC VALUE OF THE DISCH. RGE APPARATUS IN THE CHYTRIDIALES (DEB-8109815 A01); 12 MONTHS \$50,711*

PATTEN, BERNARD C; *INTEGRATED STUDIES OF THE OKEFENOKEE SWAMP ECOSYSTEM (DEB-8110639); 12 MONTHS \$361,469*

JONES, SAMUEL B; *DOCTORAL DISSERTATION RESEARCH IN SYSTEMATIC BIOLOGY (DEB-8113522); 12 MONTHS \$2,940*

AVISE, JOHN C. AND NEIGEL, JOSEPH E; *DOCTORAL DISSERTATION RESEARCH IN POPULATION BIOLOGY (DEB-8113617); 24 MONTHS \$3,000*

PATTEN, BERNARD C. PORTER, KAREN G, HODSON, ROBERT E, LAERM, JOSHUA, AND BROOK, GEORGE; *DYNAMICS OF THE ECOLOGICAL MOSAIC OF THE OKEFENOKEE SWAMP IN GEORGIA AND FLORIDA (DEB-8114823); 12 MONTHS \$198,232*

BLUM, MURRAY S; *COLLABORATIVE RESEARCH ON THE CHEMICAL ECOLOGY OF LUBBER GRASSHOPPERS (DEB-8117999); 12 MONTHS \$36,000*

CLEGG, MICHAEL T. AND RAWSON, JAMES R; *STRUCTURE AND GENETIC VARIATION OF DNA SEQUENCES IN HIGHER PLANTS (DEB-8118414); 12 MONTHS \$47,000*

GIANNASI, DAVID E; *COLLABORATIVE RESEARCH - PALEOBIOCHEMISTRY AND ULTRASTRUCTURE OF FOSSIL ANGIOSPERMS (DEB-8120515); 12 MONTHS \$34,986*

ASMUSSEN, MARJORIE A; *THEORETICAL STUDIES IN ECOLOGICAL AND POPULATION GENETICS (DEB-8200664); 36 MONTHS \$50,000*

MCDONALD, JOHN F; *GENETIC & BIOCHEMICAL BASES OF ALCOHOL ADAPTATION IN DROSOPHILA (DEB-8200865); 13 MONTHS \$43,862*

LYONS, NANCY I; *STATISTICAL METHODS FOR COMPARING WEIGHTED DIVERSITIES (DEB-8201564); 12 MONTHS \$10,104*

PORTER, KAREN G; *PARTICLE SURFACE PROPERTIES AND DIFFERENTIAL FEEDING BY ZOOPLANKTON (DEB-8203254); 24 MONTHS \$130,000*

WYATT, ROBERT, AND CAMERON, RANDALL G; *DOCTORAL DISSERTATION RESEARCH IN POPULATION BIOLOGY (DEB-8204447); 24 MONTHS \$7,800*

ATYEO, WARREN T; *ADDITIONAL CURATORIAL STORAGE UNITS FOR THE P. W. FATTIG ENTOMOLOGY MUSEUM (DEB-8204702); 12 MONTHS \$21,602*

ODUM, EUGENE P. AND CROSSLEY, D A; *ANALYSIS OF CONVENTIONAL AND NO-TILLAGE AGROECOSYSTEMS (DEB-8207206); 12 MONTHS \$89,907*

COOLEY, JAMES L. AND MEENTEMEYER, VERNON; *NUTRIENT CYCLING IN AGRICULTURAL WATERSHED ECOSYSTEMS (DEB-8207210); 18 MONTHS \$124,996*

WIEGERT, RICHARD G; *COMMUNITY POSITION AND PATTERN ALONG A CONTINUOUS THERMAL GRADIENT: PHYSICAL VERSUS BIOLOGICAL CONSTRAINTS (DEB-8210142); 12 MONTHS \$52,000*

HAWAII

BERNICE P BISHOP MUSEUM

RADOVSKY, FRANK J; *CURATORIAL AND FACILITIES SUPPORT OF THE ENTOMOLOGICAL COLLECTIONS (DEB-8698987 A02); 12 MONTHS \$70,000*

SAMUELSON, G ALLAN; *BIOGEOGRAPHY AND EVOLUTION OF NEW GUINEA-SOLOMONS AREA PHYTOPHAGOUS COLEOPTERA (DEB-8016438 A01); 12 MONTHS \$25,593*

SOHMER, SEYMOUR H; *CURATORIAL AND FACILITIES SUPPORT FOR THE HERBARIUM PACIFICUM (BSR-8108247 A01); 12 MONTHS \$44,316*

RANDALL, JOHN E; *CURATING THE FISH COLLECTION (DEB-8118244); 12 MONTHS \$39,304*

GRESSITT, J LINSLEY; *SYMPOSIUM ON BIOGEOGRAPHY OF THE TROPICAL PACIFIC, BERNICE P. BISHOP MUSEUM, HONOLULU, HAWAII, MAY 1982 (DEB-8200464); 6 MONTHS \$15,866*

UNIVERSITY OF HAWAII-MANOA

CARSON, HAMPTON L; *GENETIC PROCESSES LEADING TO THE ORIGIN OF SPECIES (DEB-7926692 A02); 31 MONTHS \$59,000*

BANNER, ALBERT H; *ALPHEID SHRIMP OF THE INDO-PACIFIC (DEB-8117603); 36 MONTHS \$20,766*

KANESHIRO, KENNETH Y; *THE ECOLOGICAL GENETICS OF HOLOMETABOLOUS INSECTS (DEB-8117985); 12 MONTHS \$35,000*

KANESHIRO, KENNETH Y; *BEHAVIORAL DIFFERENTIATION AND THE EVOLUTIONARY SEQUENCE OF SPECIES FORMATION (DEB-8206773); 24 MONTHS \$80,000*

ILLINOIS

DEPAUL UNIVERSITY

ANDERSEN, ROBERT A; *PHOTOSYNTHETIC PIGMENTS AND FLAGELLAR ULTRASTRUCTURE OF SILICA SCALED ALGAE (DEB-8119597); 12 MONTHS \$50,916*

FIELD MUSEUM OF NATURAL HISTORY

TIMM, ROBERT M; *CARE AND USE OF THE SYSTEMATIC COLLECTION OF MAMMALS (DEB-7926680 A03); 12 MONTHS \$51,463*

BURGER, WILLIAM C; *CURATORIAL SUPPORT FOR THE JOHN G. SEARLE HERBARIUM (BSR-7935717 A02); 12 MONTHS \$37,994*

KETHLEY, JOHN B; *SUPPORT FOR SYSTEMATIC COLLECTIONS OF INSECTS AND OTHER ARTHROPODS (BSR-8015675 A02); 12 MONTHS \$55,000*

FITZPATRICK, JOHN W; *SUPPORT FOR THE SYSTEMATIC COLLECTIONS IN ORNITHOLOGY (BSR-8021414 A01); 12 MONTHS \$34,232*

BURGER, WILLIAM C; *FLORA OF COSTA RICA PROJECT (BSR-8103184 A01); 12 MONTHS \$28,566*

ENGEL, JOHN J; *THE SYSTEMATICS OF TEMPERATE AND SUBANTARCTIC AUSTRALASIAN LOPHOCOLEACEAE (DEB-8109680); 36 MONTHS \$41,573*

NEVING, LORIN I. AND NEE, MICHAEL; *FLORA OF VERACRUZ (DEB-8111544 A01); 12 MONTHS \$45,314*

SOLE, G A; *SYSTEMATICS, BIOGEOGRAPHY AND ECOLOGY OF WESTERN AND CENTRAL AUSTRALIAN CAMAENID LAND SNAILS (DEB-8119208); 12 MONTHS \$30,028*

STEWART, DONALD J. AND JOHNSON, ROBERT K; *SUPPORT FOR THE CARE AND USE OF SYSTEMATIC COLLECTIONS OF FISHES (DEB-8204071); 60 MONTHS \$256,354*

INGET, ROBERT F. AND MARX, HYMEN; *SUPPORT FOR THE CARE AND USE OF SYSTEMATIC COLLECTIONS OF AMPHIBIANS AND REPTILES (DEB-8204072); 36 MONTHS \$141,394*

TURNBULL, WILLIAM D. AND BOLT, JOHN R; *CARE AND USE OF SYSTEMATIC COLLECTIONS OF FOSSIL VERTEBRATES (DEB-8206892); 24 MONTHS \$129,061*

NORTHWESTERN UNIVERSITY-CHICAGO CAMPUS-MEDICAL SCHOOL

NADLER, CHARLES F; *COLLABORATIVE RESEARCH ON SYSTEMATICS OF Holarctic MAMMALS (DEB-8007246 A02); 12 MONTHS \$38,700*

NORTHWESTERN UNIVERSITY

BEATTIE, ANDREW J. AND CULVER, DAVID C; *THE EVOLUTIONARY ECOLOGY OF MYRMECOCHORY IN CORYDALIS AUREA (DEB-8203932); 12 MONTHS \$39,772*

UNIVERSITY OF CHICAGO

LOMBARD, R E; *THE AUDITORY SYSTEM OF ANURA: STRUCTURE, ORIGIN, AND FUNCTION (BSR-8002619 A02); 12 MONTHS \$22,044*

RADINSKY, LEONARD B; *CARNIVORE AND UNGULATE SKULL MORPHOLOGY (DEB-8100827); 12 MONTHS \$28,000*

SEPKOSKI, J; *EVOLUTION OF TAXONOMIC DIVERSITY IN THE OCEANS (DEB-8108890); 24 MONTHS \$49,007*

ARNOLD, STEVAN J; *QUANTITATIVE GENETICS AND SELECTION IN NATURAL POPULATIONS (BSR-8111439 A01); 12 MONTHS \$54,000*

ALTMANN, STUART A. AND STEPHENS, MARTIN; *DOCTORAL DISSERTATION RESEARCH IN POPULATION BIOLOGY (DEB-8113258); 12 MONTHS \$3,173*

LAUDER, GEORGE V; *STRUCTURAL AND FUNCTIONAL EVOLUTIONARY PATTERNS OF ACTINOPTERYGIAN FISHES (DEB-8115048); 12 MONTHS \$41,472*

WADE, MICHAEL J; *KIN SELECTION IN COMPLEX GROUPS (DEB-8200347); 12 MONTHS \$40,000*

UNIVERSITY OF ILLINOIS AT CHICAGO CIRCLE

WELLER, STEPHEN G; *LIFE HISTORY CHARACTERISTICS OF THE SAND DUNE SPECIES LITHOSPERMUM CAROLINIENSE (BSR-8021160 A01); 12 MONTHS \$16,400*

UNIVERSITY OF ILLINOIS AT URBANA

LYNCH, MICHAEL R; *ECOLOGICAL GENETICS OF DAPHNIA PULEX (DEB-7911562 A01); 24 MONTHS \$80,000*

CAROTHERS, ZANE B; *BLEPHAROPLASTS AND SPERMATIZOIDS AS SOURCES OF NEW PHYLOGENETIC INFORMATION (DEB-8004265 A02); 12 MONTHS \$5,250*

DEWET, JOEL M; *SYSTEMATICS OF TRIPSACUM (GRAMINEAE) (DEB-8020085 A01); 12 MONTHS \$40,810*

HOFFMAN, LAUREN E; *A TAXONOMIC AND PHYLOGENETIC INVESTIGATION OF THE SPEAEROPLEACEAE (DEB-8021988 A01); 12 MONTHS \$36,100*

BLAKE, DANIEL B; *SYSTEMATICS OF POST-PALEOZOIC FAMILIES AND ORDERS OF ASTEROIDEA (DEB-8106922); 24 MONTHS \$49,214*

SPARKS, RICHARD E; *ECOLOGICAL STRUCTURE AND FUNCTION OF MAJOR RIVERS IN ILLINOIS (BSR-8114563); 12 MONTHS \$251,525*

MAXSON, LINDA E; *MOLECULAR PHYLOGENETIC STUDIES OF SELECT AMPHIBIANS (DEB-8201587); 24 MONTHS \$80,000*

WALDBAUER, GILBERT P; *BATESIAN MIMICRY: MIMETIC ADVANTAGE AND PHENOLOGICAL RELATIONSHIPS (DEB-8202772); 12 MONTHS \$21,176*

KARR, JAMES R; *HABITAT SELECTION AND POPULATION VARIABILITY IN A TROPICAL FOREST AVIFAUNA (DEB-8206672); 24 MONTHS \$25,004*

BOUSEMAN, JOHN K; *SYSTEMATICS OF THE GENUS ANDRENA IN NORTH AMERICA (DEB-8207173); 24 MONTHS \$41,692*

UNIVERSITY OF ILLINOIS MEDICAL CTR AT CHICAGO

CRACRAFT, JOEL; *PHYLOGENY OF NON-PASSERIFORMES (AVES) (DEB-7921492 A02); 12 MONTHS \$23,523*

INDIANA

INDIANA STATE UNIVERSITY

BAKKEN, GEORGE S; *THERMOREGULATORY PHYSIOLOGICAL ECOLOGY AND MICROCLIMATE (DEB-8021381 A01); 12 MONTHS \$30,000*

INDIANA UNIVERSITY CENTRAL SYSTEM OFFICE

GASTONY, GERALD J. AND DARROW, DAVID C; *DOCTORAL DISSERTATION RESEARCH IN POPULATION BIOLOGY (DEB-8117239); 24 MONTHS \$5,173*

INDIANA UNIVERSITY, BLOOMINGTON

DILCHER, DAVID L; *EARLY ANGIOSPERM EVOLUTION AND ECOLOGY (DEB-7910720 A02); 12 MONTHS \$77,106*

WATSON, MAXINE A; *POPULATION REGULATION IN THE WATER HYACINTH (DEB-7923435 A01); 12 MONTHS \$37,104*

MALACINSKI, GEORGE M; MAINTENANCE OF GENETIC STOCKS OF THE AXOLOTL, *AMBYSTOMA MEXICANUM* (BSR-8010618 A02); 12 MONTHS \$70,000

MANCHESTER, STEVEN R; SYSTEMATICS AND EVOLUTIONARY STATUS OF ANGIOSPERMS FROM THE Eocene OF OREGON (DEB-8111089); 24 MONTHS \$49,965

RICHMOND, ROLLIN C; ESTERASE 6 AND REPRODUCTIVE BEHAVIOR IN *DROSOPHILA* (DEB-8118405); 12 MONTHS \$47,000

GASTONY, GERALD J; ELECTROPHORETIC STUDIES OF GENETIC VARIABILITY IN HOMOSPOROUS FERNS (DEB-8006056); 12 MONTHS \$41,809

INDIANA UNIV-PURDUE UNIV AT INDIANAPOLIS

PACHUT, JOSEPH F; COMPONENTS OF MORPHOLOGIC VARIATION IN FOSSIL BRYOZOANS: PALEOSTABILITY, TAXONOMIC AND EVOLUTIONARY IMPLICATIONS (BAR-8100553*); 24 MONTHS \$6,000

PURDUE UNIVERSITY

SOLOMON, BRUCE P; INTRA- AND INTER-PLANT VARIATION IN ALKALOIDS (DEB-8004288 A01); 24 MONTHS \$63,990

RABENOLD, KERRY N; COMPARATIVE STUDIES OF COMPLEX SOCIAL GROUPS (DEB-8007717 A01); 12 MONTHS \$44,649

WASER, PETER M; PHILOPATRY AND DISPERSAL IN SOLITARY MAMMALS (DEB-8112773); 24 MONTHS \$48,919

HENNEN, JOE F; LIFE HISTORY AND TAXONOMIC STUDIES OF NEOTROPICAL RUST FUNGI (UREDINALES) (DEB-8115592); 24 MONTHS \$64,637

HOWARD, RICHARD D; EXPERIMENTAL ANALYSIS OF POPULATION STRUCTURE (DEB-8118165); 24 MONTHS \$40,000

KONOPKA, ALLAN; PHYSIOLOGICAL ECOLOGY OF PLANKTONIC BLUE-GREEN ALGAE (DEB-801057); 12 MONTHS \$35,948

MCCAFFERTY, W P; SYSTEMATICS OF THE EPHEMEROIDEA (INSECTA) (DEB-8010867); 12 MONTHS \$8,307

SAWYER, STANLEY A; PROBLEMS IN POPULATION GENETICS (MATHEMATICS SCIENCES) (MCS-8002558*); 36 MONTHS \$24,850

UNIVERSITY OF NOTRE DAME

HELLENTHAL, RONALD A; INVESTIGATIONS OF GEOMYID RELATIONSHIPS USING DATA ON THEIR MALLOPHAGA PARASITES (BSR-8117567); 24 MONTHS \$41,826

IOWA

UNIVERSITY OF IOWA

DINGLE, HUGH; INSECT MIGRATION AND LIFE HISTORY STRATEGIES (DEB-792144 A02); 12 MONTHS \$54,605

HUBBELL, STEPHEN P; DEMOGRAPHIC ANALYSIS OF A TROPICAL FOREST IN PANAMA (DEB-792157 A02); 12 MONTHS \$45,000

HOWE, HENRY F; ECOLOGY OF A NEOTROPICAL SEED-DISPERSAL SYSTEM (DEB-792237 A01); 24 MONTHS \$59,981

WIEMER, DAVID F, AND HUBBELL, STEPHEN P; SEASONAL VARIATION IN PLANT PALATABILITY TO AN INSECT HERBIVORE (DEB-8010638 A01); 12 MONTHS \$50,210

HENDRIX, STEPHEN D; INDIRECT EFFECTS OF HERBIVORY ON RECRUITMENT IN *PASTINACA SATIVA* L (DEB-8005534); 12 MONTHS \$40,077

KANSAS

KANSAS STATE UNIVERSITY

SMITH, CHRISTOPH C; POLLEN PROFILES AND THE BREEDING SYSTEM OF LODGEPOLE PINE: A COLLABORATIVE EFFORT (BSR-7923190 A01); 24 MONTHS \$40,000

HULBERT, LLOYD C; FIRE EFFECTS IN BLUESTEM PRAIRIE (BSR-7922903 A02); 12 MONTHS \$34,364

MARZOLF, GEORGE R; THE ROLE OF FIRE AND OTHER DISTURBANCES IN DETERMINING ECOSYSTEM PROCESSES AND PATTERNS IN THE KONZA PRAIRIE, KANSAS (DEB-8012166 A02); \$10,701

ROBEL, ROBERT J, REICHMAN, O J, AND ZIMMERMAN, JOHN L; AN ENERGETIC APPROACH TO HABITAT EVALUATION (DEB-8023548 A01); 12 MONTHS \$27,000

MARZOLF, GEORGE R; INTEGRATION OF LONG TERM ECOLOGICAL RESEARCH: A NATIONAL NETWORK (DEB-8114529); 18 MONTHS \$114,973

REICHMAN, O J; RESOURCE MANAGEMENT STRATEGIES INVOLVING DESERT RODENTS, STORED SEEDS, AND DOMESTICATED MOLDS (DEB-8006502); 18 MONTHS \$45,000

BARKLEY, THEODORE M; PREPARATION OF THE MANUSCRIPT FOR THE GREAT PLAINS FLORA (BSR-8006545); 4 MONTHS \$7,306

MARZOLF, GEORGE R; FOOD RESOURCES OF FILTER ZOOPLANKTON (DEB-8007311); 24 MONTHS \$100,695

UNIVERSITY OF KANSAS MAIN CAMPUS

MICHENER, CHARLES D; THE EVOLUTION AND SYSTEMATICS OF APIDAE (DEB-7730035 A04); 12 MONTHS \$62,000

HOFFMANN, ROBERT S; COLLABORATIVE RESEARCH ON SYSTEMATICS OF Holarctic MAMMALS (DEB-8004148 A02); 12 MONTHS \$32,300

LICHTWARDT, ROBERT W; SYSTEMATICS AND EVOLUTION OF THE TRICHOMYCETES (BSR-8019734 A02); 12 MONTHS \$27,096

GAINES, MICHAEL S; DEMOGRAPHIC INVESTIGATION OF MICROTINE POPULATIONS (DEB-8006443 A01); 12 MONTHS \$31,100

O'BRIEN, W JOHN; PLANKTIVOROUS FISH AND ZOOPLANKTON: THE PREDATOR-PREY INTERACTION (BSR-8011740 A01); 12 MONTHS \$49,970

FROST, JOHN S; SYSTEMATIC BIOLOGY OF THE RANA PIPIENS COMPLEX (DEB-8108166); 24 MONTHS \$65,900

SCHULTZ, HANS-PETER; REORGANIZATION OF THE VERTEBRATE PALEONTOLOGICAL COLLECTION OF THE MUSEUM OF NATURAL HISTORY, UNIVERSITY OF KANSAS (DEB-8115556); 12 MONTHS \$211,621

HUMPHREY, PHILIP S; SYSTEMATICS, ECOLOGY, AND PHYLOGENY OF STREAMER DUCKS (TACHYERES) (DEB-8117944); 24 MONTHS \$50,000

ARMITAGE, KENNETH B; POPULATION DYNAMICS AND INTERACTION OF A SEASONALLY ACTIVE MAMMAL (DEB-8111291); 12 MONTHS \$37,500

BYERS, GEORGE W; REVISION OF THE CRANE FLY GENUS *NEPHROTOMA* IN NORTH AMERICA (DIPTERA: TIPULIDAE) (DEB-8006632); 24 MONTHS \$19,083

HAMRICK, JAMES L, AND LOVELESS, MARILYN D; DOCTORAL DISSERTATION RESEARCH IN POPULATION BIOLOGY (DEB-8005544); 12 MONTHS \$2,630

TRUEB, LINDA; THE EVOLUTION OF PIPPOID FROGS (DEB-8007631); 12 MONTHS \$39,995

HAMRICK, JAMES L; POLLEN PROFILES AND THE BREEDING SYSTEM OF LODGEPOLE PINE: A COLLABORATIVE EFFORT (DEB-8113260); 24 MONTHS \$43,000

KENTUCKY

UNIVERSITY OF KENTUCKY

CROWLEY, PHILIP H; COLLABORATIVE RESEARCH ON THE COEXISTENCE OF LITTORAL ODONATA (DEB-8104424 A01); 12 MONTHS \$38,275

BARR, THOMAS C; COLLABORATIVE STUDIES ON EVOLUTIONARY PATTERNS IN CAVE-NICOLLOUS AND MONTANE CARABID BEETLES (DEB-8002339); 24 MONTHS \$25,000

LOUISIANA

LOUISIANA STATE UNIVERSITY SYSTEM OFFICE

BLACKWELL, MEREDITH; BIOSYSTEMATIC STUDIES OF SONORAN DESERT TRYXOMYCETES (BSR-8005635); 12 MONTHS \$6,569

LOUISIANA STATE UNIVERSITY, BATON ROUGE

HARNER, MARK S; SUPPORT OF THE LOUISIANA STATE UNIVERSITY MUSEUM OF FROZEN TISSUES (DEB-8010391); 12 MONTHS \$16,370

TUCKER, SHIRLEY C; ESTABLISHMENT OF SYMMETRY IN THE LEGUMINOSAE (DEB-8004132); 24 MONTHS \$65,000

MAINE

BATES COLLEGE

PITELKA, LOUIS F; THE POPULATION BIOLOGY OF A FOREST UNDERSTORY HERB (DEB-7923148 A01); 24 MONTHS \$70,000

JACKSON LABORATORY

RODERICK, THOMAS H, AND SANFORD, BARBARA; MOUSE MUTANT STOCKS CENTER (DEB-7926708 A02); 12 MONTHS \$121,495

MOUNT DESERT ISLAND BIOLOGICAL LABORATORY

GOLDSTEIN, LEON; OPERATIONAL SUPPORT FOR THE MOUNT DESERT ISLAND BIOLOGICAL LABORATORY (DEB-8100823 A01); 12 MONTHS \$22,500

UNIVERSITY OF MAINE, ORONO

JACOBSON, GEORGE L, AND DAVIS, RONALD B; A PALAEOCOLOGICAL STUDY OF VEGETATION DEVELOPMENT AND CLIMATIC CHANGE IN MAINE (BSR-8004171 A02); 12 MONTHS \$59,857

TYLER, SETH; SYSTEMATICS OF THE TURBELLARIAN ACOLIA (DEB-8116894); 12 MONTHS \$41,836

MARYLAND

AMERICAN TYPE CULTURE COLLECTION

JONG, S C; QUALITY CONTROL IN THE AMERICAN TYPE CULTURE COLLECTION (DEB-7921031 A02); 12 MONTHS \$99,473

GHERNA, ROBERT L; TAXONOMIC STATUS OF THE BACTERIA OF THE AMERICAN TYPE CULTURE COLLECTION (DEB-7921436 A02); 12 MONTHS \$109,400

DAGGETT, PIERRE-MA; DEVELOPMENT AND ENHANCEMENT OF THE NATIONAL RESOURCE OF STANDARDIZED LIVING PROTOZOA (DEB-8007092); 36 MONTHS \$222,883

CHESAPEAKE RESEARCH CONSORTIUM INC

CORRELL, DAVID L; NUTRIENT DYNAMICS OF THE RHODE RIVER ECOSYSTEM (DEB-7911543 A02); 10 MONTHS \$209,062

CORRELL, DAVID L; NUTRIENT DYNAMICS OF THE RHODE RIVER ECOSYSTEM (DEB-8007112); 18 MONTHS \$199,997

JOHNS HOPKINS UNIVERSITY

POWERS, DENNIS A; BIOCHEMICAL BASES FOR NATURAL SELECTION OF *FUNDULUS HETEROCITUS* (DEB-8007006); 12 MONTHS \$69,875

UNIVERSITY OF MARYLAND, BALTIMORE COUNTY

WISE, DAVID H; PHENOTYPIC FLEXIBILITY AND GENETIC VARIATION IN A LIFE HISTORY CHARACTER (DEB-8115908); 24 MONTHS \$51,000

UNIVERSITY OF MARYLAND, COLLEGE PARK-CENTER FOR ENVIRONMENTAL & ESTUARINE STUDIES

FISHER, THOMAS R; NUTRIENT SUPPLY AND PRIMARY PRODUCTIVITY IN AMAZON FLOODPLAIN LAKES (DEB-8111599*); 12 MONTHS \$176,847

UNIVERSITY OF MARYLAND, COLLEGE PARK

ALLAN, J DAVID; LIFE HISTORY VARIATION IN A CYCLOPOID COPEPOD (BSR-8004450 A02); 12 MONTHS \$47,950

GILL, DOUGLAS E; THE REGULATION OF NATURAL METAPOPULATIONS (BSR-8005080 A02); 12 MONTHS \$44,050

BARBOSA, PEDRO; INSECT PARASITOID FITNESS AND HERBIVORE NUTRITION (DEB-8010780 A01); 12 MONTHS \$22,165

FISHER, THOMAS R. AND COWPER, SUSAN W.; DOCTORAL DISSERTATION RESEARCH IN POPULATION BIOLOGY (DEB-8106991); 18 MONTHS \$6,500

BORGIA, GERALD; THE FUNCTIONS OF DISPLAY (BNS-8113477 A01*); 12 MONTHS \$20,000

HIGHTON, RICHARD; GENETIC VARIATION OF SPECIES OF THE GENUS *PLETHODON* (AMPHIBIA, CAUDATA) (DEB-8117983); 12 MONTHS \$40,000

REVEAL, JAMES L. AND BEDELL, HOLLIE G.; DOCTORAL DISSERTATION RESEARCH IN SYSTEMATIC BIOLOGY (DEB-8118603); 12 MONTHS \$10,000

REZNICK, DAVID; EFFECTS OF PREDATION ON LIFE HISTORY EVOLUTION (DEB-8212274); 15 MONTHS \$15,998

MASSACHUSETTS

BOSTON UNIVERSITY

HUMES, ARTHUR G.; A REVISION OF THE XARIFIID ASSOCIATES OF CORALS (BSR-8016241 A 01); 12 MONTHS \$22,927

TAMARIN, ROBERT B. AND LEVY, CHARLES K.; DETERMINING KINSHIP IN VOLES (MICROTUS) WITH RADIONUCLIDES (BSR-8103483 A01); 12 MONTHS \$37,500

PRIMACK, RICHARD B.; RADIONUCLIDE LABELING OF SEEDS TO ASSESS FITNESS IN NATURAL POPULATIONS (DEB-8204108); 12 MONTHS \$35,000

KUNZ, THOMAS H. AND FUJITA, MARTHA S.; DOCTORAL DISSERTATION RESEARCH IN POPULATION BIOLOGY (DEB-8206998); 12 MONTHS \$2,800

CLARK UNIVERSITY

LIVDAHL, TODD P.; HABITAT CERTAINTY, DISPERSAL AND COLONIZING ABILITY (DEB-8206942); 24 MONTHS \$50,000

HARVARD UNIVERSITY-HARVARD FOREST

TORREY, JOHN G. AND TJEKEMA, JOHN; THE ECOLOGY AND DEVELOPMENTAL BIOLOGY OF NITROGEN FIXATION IN ACTINOMYCETE-NODULATED ANGIOSPERMS (DEB-8106952 A01*); \$89,788

HARVARD UNIVERSITY

MCLEROY, MICHAEL B. AND WOFSY, STEVEN C.; TRANSFORMATIONS OF NITROGEN AND BIOGENIC SOURCES OF N₂ AND NO (DEB-7920282 A01); 24 MONTHS \$200,000

LEVI, HERBERT W.; SYSTEMATICS OF THE ARANEIDAE (DEB-8204042 A01); 12 MONTHS \$37,000

LIEM, KAREL F.; MANAGEMENT, MAINTENANCE AND USE OF THE FISH COLLECTION (DEB-8202059 A01); 12 MONTHS \$38,440

TRYON, ROLLA M. AND TRYON, ALICE F.; EVOLUTION OF SURFACE AND WALL STRUCTURE OF PTERIDOPHYTE SPORES (DEB-8105726 A01); 12 MONTHS \$29,059

WOOD, CARROLL E. AND MILLER, NORTON G.; A GENERIC FLORA OF THE SOUTHEASTERN UNITED STATES (PHASE II) (BSR-8111520 A01); 12 MONTHS \$74,387

SEBENS, KENNETH P. AND ARONSON, RICHARD B.; DOCTORAL DISSERTATION RESEARCH IN POPULATION BIOLOGY (DEB-8114684); 12 MONTHS \$5,100

ALBERCH, PERE; FURTHER MODERNIZATION OF THE HERPETOLOGICAL COLLECTION AT THE MUSEUM OF COMPARATIVE ZOOLOGY (DEB-8115960); 12 MONTHS \$57,653

WILSON, EDWARD O.; BEHAVIOR AND ORGANIZATION IN INSECT SOCIETIES (BSR-8119350); 12 MONTHS \$45,934

ALBERCH, PERE; HETEROCHRONY AND MORPHOLOGICAL DIVERSIFICATION IN AMPHIBIANS (DEB-8120917); 24 MONTHS \$49,132

WILSON, EDWARD O., MCCINLEY, RONALD J. AND BOWERS, MARION D.; IMPROVEMENT OF THE INSECT COLLECTIONS OF THE MUSEUM OF COMPARATIVE ZOOLOGY (BSR-8203845); 12 MONTHS \$54,521

LIEM, KAREL F.; FUNCTIONAL-MORPHOLOGICAL PATTERNS AND FEEDING BIOLOGY OF LABROID FISHES (DEB-8206888); 12 MONTHS \$35,000

HARVARD UNIVERSITY-HERBARIUM

SOLBRIG, OTTO T.; SUPPORT OF BOTANICAL SYSTEMATIC COLLECTIONS AT HARVARD UNIVERSITY (DEB-8005591 A02); 12 MONTHS \$285,085

INDIVIDUAL AWARD

CARPENTER, FRANK M.; EVOLUTION OF PALEOZOIC AND MESOZOIC INSECTS (DEB-8205398); 12 MONTHS \$12,532

MARINE BIOLOGICAL LABORATORY

PETERSON, BRUCE J.; DYNAMICS OF SULFUR IN A SALT MARSH ECOSYSTEM (BSR-8104701 A01); 12 MONTHS \$316,619

WOODWELL, GEORGE M.; THE BIOTA AND THE GLOBAL CARBON CYCLE (DEB-8110477); 12 MONTHS \$350,556

GROSS, PAUL R.; IMPROVING MARINE RESOURCES FACILITIES AT THE MBL (DEB-8209469*); 24 MONTHS \$10,000

NORTHEASTERN UNIVERSITY

RUDY, PAUL P.; IMPROVEMENT OF GENERAL FACILITIES AT MARINE SCIENCE INSTITUTE, NAHANT (BSR-8209171*); 12 MONTHS \$5,000

TUFTS UNIVERSITY

PECHENIK, JAN A.; CHARACTERIZING DELAY OF METAMORPHOSIS BY GASTROPOD LARVAE (OCE-8121643*); 24 MONTHS \$15,000

UNIVERSITY OF MASSACHUSETTS, AMHERST

PROKOPY, RONALD J.; FORAGING BEHAVIOR OF A PARASITIC INSECT (BSR-8109381); 12 MONTHS \$55,000

MULCAHY, DAVID L.; POTENTIAL AND ACTUAL INFLUENCE OF POLLEN SELECTION (DEB-8118740); 24 MONTHS \$74,112

KROODSMA, DONALD E.; THE BIOLOGICAL SIGNIFICANCE OF AVIAN VOCAL LEARNING (BNS-8201085*); 12 MONTHS \$30,000

WOODS HOLE OCEANOGRAPHIC INSTITUTION

TEAL, JOHN M.; PRODUCTION AND SPECIES DISTRIBUTION IN FERTILIZED AND CONTROL SALT MARSH PLANTS (BSR-8012437 A02); 12 MONTHS \$17,915

DACEY, JOHN; KNUDSEN-TRANSITIONAL FLOW AND PRESSURIZED VENTILATION IN AQUATIC MACROPHYTES (DEB-8119819); 24 MONTHS \$59,664

VERONIS, GEORGE; SUMMER WORKSHOPS IN GEOPHYSICAL FLUID DYNAMICS; WOODS HOLE, MASSACHUSETTS (MATHEMATICAL SCIENCES) (OES-8200450*); 12 MONTHS \$10,000

MICHIGAN

AMERICAN ENTOMOLOGICAL INSTITUTE

TOWNES, HENRY X.; ICHNEUMON-FLIES OF AMERICA NORTH OF MEXICO: SUBFAMILY TRYPHONINAE (HYMENOPTERA) (BSR-8014042 A01); 12 MONTHS \$37,500

MICHIGAN STATE UNIVERSITY

WERNER, PATRICIA A.; PLANT LIFE HISTORY TRADEOFFS IN THE REGENERATIVE STAGES (DEB-7923945 A02); 12 MONTHS \$45,000

WILSON, DAVID S.; THE EVOLUTION OF COMMUNITIES IN STRUCTURED DEMES (DEB-8004164 A01); 24 MONTHS \$75,001

TIEDJE, JAMES M.; DENTRIFICATION IN NATURAL ECOSYSTEMS (DEB-8012168 A02); 12 MONTHS \$147,882

KLUG, MICHAEL J.; INVERTEBRATE MICROBIAL INTERACTIONS INFLUENCING DETRITAL PROCESSING IN LOTIC ECOSYSTEMS (DEB-8022634 A01); 12 MONTHS \$141,137

KLUG, MICHAEL J. AND TIEDJE, JAMES M.; MICROBIAL DECOMPOSITION IN LAKE SEDIMENTS (BSR-8108994 A01); 12 MONTHS \$113,761

MURPHY, PETER G.; SEASONAL DYNAMICS AND SUCCESSION IN A SUBTROPICAL DRY FOREST (BSR-8110208 A01); 12 MONTHS \$31,996

WERNER, EARL E.; HABITAT USE AND SPECIES INTERACTIONS IN FISH (DEB-8119258); 12 MONTHS \$75,000

LAUFF, GEORGE H.; WORKSHOP ON DATA MANAGEMENT AT BIOLOGICAL FIELD STATIONS MAY 17-20 AT THE W.K. KELLOGG BIOLOGICAL STATION, HICKORY CORNERS, MI (DEB-8205372); 6 MONTHS \$25,552

UNIVERSITY OF MICHIGAN-ANN ARBOR

CONGDON, JUSTIN D. AND ALEXANDER, RICHARD D.; LIFE HISTORY CHARACTERISTICS OF REPTILES (DEB-7906031 A04); 12 MONTHS \$26,355

SMOUSE, PETER E.; STUDIES OF ECOLOGICAL SELECTION IN HAPLOID POPULATIONS (DEB-7910430 A02); 12 MONTHS \$34,000

SHAFFER, ROBERT L.; CURATION AT THE UNIVERSITY OF MICHIGAN HERBARIUM (DEB-7919371 A02); 12 MONTHS \$126,310

GRANT, PETER R.; ECOLOGY AND BEHAVIOR OF GEOSPIZA ON THE GALAPAGOS ISLANDS (DEB-7921119 A02); 12 MONTHS \$76,251

DAWSON, WILLIAM R.; ADAPTATION TO CLIMATE (DEB-8021389 A01); 12 MONTHS \$36,700

ADAMS, JULIAN P.; EVOLUTION IN BACTERIAL/PLASMID POPULATIONS (BSR-8022185 A01); 12 MONTHS \$45,000

FOGEL, ROBERT; A TAXONOMIC REVISION OF THE GENUS *HYMENOGASTER* (BASIDIOMYCOTINA) IN NORTH AMERICA (DEB-8023245 A01); 12 MONTHS \$23,917

PAYNE, ROBERT B.; CULTURAL EVOLUTION OF LOCAL BEHAVIOR TRADITIONS (BNS-8102404 A01*); 12 MONTHS \$17,669

BROWN, WESLEY M. AND WRIGHT, JOHN W.; MITOCHONDRIAL DNA AND THE GENUS *CNEMIDOPHORUS* (DEB-8105615 A01); 12 MONTHS \$54,000

BECK, CHARLES B.; MORPHOLOGY AND EVOLUTIONARY RELATIONSHIPS OF DEVONIAN PLANTS (DEB-8113542); 12 MONTHS \$40,271

ANDERSON, WILLIAM R. AND HENSOLD, NANCY C.; DOCTORAL DISSERTATION RESEARCH IN SYSTEMATIC BIOLOGY (DEB-8114958); 12 MONTHS \$6,370

LEHMAN, JOHN T.; NUTRIENT FLUXES IN PLANKTON COMMUNITIES (DEB-8116428); 24 MONTHS \$65,020

ANDERSON, WILLIAM R. AND BORNSTEIN, ALLAN J.; DOCTORAL DISSERTATION RESEARCH IN SYSTEMATIC BIOLOGY (DEB-8116762); 12 MONTHS \$6,457

WAGNER, WARREN H. AND JOHNSON, DAVID M.; DOCTORAL DISSERTATION RESEARCH IN SYSTEMATIC BIOLOGY (DEB-8118247); 12 MONTHS \$5,500

ANDERSON, WILLIAM R. AND MCVAUGH, ROGERS; PUBLICATION OF THE FLORA NOVA-GALICIANA (DEB-8118738); 24 MONTHS \$39,884

GANS, CARL; FUNCTIONAL MORPHOLOGY OF SQUAMATE REPTILIA (DEB-8121229); 36 MONTHS \$30,017

WAGNER, WARREN H. AND WAGNER, FLORENCE S.; EVOLUTION AND SYSTEMATICS OF *BOTRYCHUM* (DEB-8202768); 24 MONTHS \$65,000

GINGERICH, PHILIP D.; EVOLUTION OF THE NORTH AMERICAN MAMMAL FAUNA ACROSS THE PALEOCENE-Eocene BOUNDARY (DEB-8206242); 24 MONTHS \$96,000

VANDERMEER, JOHN H. AND ROSSET, PETER M.; DOCTORAL DISSERTATION RESEARCH IN ECOLOGY (DEB-8206772); 24 MONTHS \$4,000

FORD, RICHARD I. AND JOHNS, TIMOTHY A.; DOCTORAL DISSERTATION RESEARCH IN SYSTEMATIC BIOLOGY (DEB-8208398); 12 MONTHS \$7,174

NUSSBAUM, RONALD A.; SYSTEMATICS AND BIOGEOGRAPHY OF THE AMPHIBIANS OF THE SEYCHELLES ARCHIPELAGO (DEB-8208706); 24 MONTHS \$60,004

WAYNE STATE UNIVERSITY

- GOODMAN, MORRIS; *BIOMOLECULAR SYSTEMATICS OF PRIMATES AND OTHER EUTHERIA* (BSR-7810717 A03*); 12 MONTHS \$60,460
 HONGH, R. A.; *METABOLIC INFLUENCE AND POPULATION RESPONSE OF AQUATIC PLANTS IN A FRESHWATER SYSTEM* (DEB-8103528); 24 MONTHS \$41,000
 MOORE, WILLIAM S.; *HYBRID ZONES AND SPECIATION THEORY* (DEB-8105195 A01); 12 MONTHS \$44,000
 FREEMAN, D. CARL; *THE ADAPTIVE SIGNIFICANCE OF SEASONAL CHANGES IN POLLEN AND SEED PRODUCTION IN A SUB-DIOECIOUS PLANT* (BSR-8111010 A01); 12 MONTHS \$37,000
 WEISS, MARK L.; *RECONSTRUCTION OF PRIMATE RELATIONSHIPS* (BNS-8203777*); 12 MONTHS \$10,000

MINNESOTA

- UNIVERSITY OF MINNESOTA-AGRICULTURAL EXPERIMENT STATION
 SHAPIRO, JOSEPH; *COMPLEX INTERACTIONS BETWEEN DAPHNIA AND APHANIZOEMON* (DEB-7921755 A03); 12 MONTHS \$38,140
 UNIVERSITY OF MINNESOTA-MEDICAL SCHOOL
 SCHMIDT, EDWIN L.; *ADAPTIVE RESPONSES OF NITRIFYING POPULATIONS IN NATURAL SYSTEMS* (DEB-8121642); 18 MONTHS \$40,000
 UNIVERSITY OF MINNESOTA
 GORHAM, EVILLE; *THE ECOLOGY AND BIOGEOCHEMISTRY OF SPHAGNUM BOGS IN NORTH AMERICA* (DEB-7922142 A02); 12 MONTHS \$477,629
 WRIGHT, HERBERT E.; *STUDIES IN QUATERNARY PALEOLIMNOLOGY* (DEB-8004286 A02); 12 MONTHS \$79,463
 WRIGHT, HERBERT E. AND KING, GEORGE; *DOCTORAL DISSERTATION RESEARCH IN ECOLOGY* (DEB-8109901); 24 MONTHS \$7,862
 MCLAUGHLIN, DAVID J.; *AN ULTRASTRUCTURAL STUDY OF THE AURICULARIUM FUNGI* (DEB-8119216); 24 MONTHS \$60,000
 DAVIS, MARGARET B.; *RANGE EXTENSIONS OF FOREST TREES: HEMLOCK* (DEB-8200290*); 18 MONTHS \$70,000
 UNIVERSITY OF MINNESOTA AT SAINT PAUL
 TILMAN, G. DAVID; *SUCCESSION, PRODUCTIVITY, AND DYNAMICS IN TEMPERATE MIXED ECOSYSTEMS IN MINNESOTA* (DEB-8114302); 12 MONTHS \$245,377

MISSOURI

- MISSOURI BOTANICAL GARDEN
 D'ARCY, WILLIAM G.; *SUSTAINED PLANT SAMPLING AND PHYTOGEOGRAPHY IN PANAMA* (DEB-7922192 A02*); 12 MONTHS \$51,559
 CROSBY, MARSHALL R.; *SUPPORT FOR SYSTEMATICS RESEARCH COLLECTIONS AT THE MISSOURI BOTANICAL GARDEN* (BSR-8005563 A02); 12 MONTHS \$190,000
 CROAT, THOMAS B.; *A REVISION OF ANTHURUM SECTION PACHYNURUM (ARACEAE)* (DEB-8011649 A02); 12 MONTHS \$52,906
 DAVIDSE, GERRIT; *FLORA MESOAMERICANA* (BSR-8107863 A01); 12 MONTHS \$80,831
 RAVEN, PETER H.; *JOINT SINO-AMERICAN FIELD INVESTIGATIONS ON THE FLORA OF THE EASTERN UNITED STATES* (DEB-8119209); 12 MONTHS \$34,300
 RAVEN, PETER H.; *SYSTEMATICS AND EVOLUTION OF THE ONAGRACEAE* (DEB-8119291); 12 MONTHS \$75,388
 RAVF*, PETER H.; *SYSTEMATICS AND EVOLUTION OF THE ONAGRACEAE* (DEB-8119291 A01); \$12,312
 GOLDBLATT, PETER; *SYSTEMATIC STUDIES IN IRIDACEAE* (DEB-8119292); 36 MONTHS \$94,870
 STEVENS, WARREN D.; *FLORISTICS OF NICARAGUA* (DEB-8119551); 12 MONTHS \$27,000
 RAVEN, PETER H.; *PUBLICATION OF THE SYSTEMATICS AND EVOLUTION OF FUCHSIA SECT. FUCHSIA (ONAGRACEAE)* (DEB-8119287); 12 MONTHS \$5,720
 RAVEN, PETER H.; *SUPPORT FOR THE PUBLICATION OF 'THE SYSTEMATICS AND EVOLUTION OF CIRCSEA (ONAGRACEAE)'* (DEB-8200640); 12 MONTHS \$5,500
 RAVEN, PETER H.; *PUBLICATION OF 'THE SYSTEMATICS AND EVOLUTION OF EPILOBIUM (ONAGRACEAE) IN SOUTH AMERICA'* (DEB-8301242); 12 MONTHS \$2,750
 RAVEN, PETER H.; *ACQUISITION OF FIELD TRANSPORTATION* (DEB-8205529*); 12 MONTHS \$31,700
 SOLOMON, JAMES C.; *A FLORISTIC SURVEY OF THE YUNGAS VALLEYS OF LA PAZ, BOLIVIA* (DEB-8206522); 36 MONTHS \$99,666
 D'ARCY, WILLIAM G.; *SYMPOSIUM ON THE TAXONOMY AND THE BIOLOGY OF THE SOLANACEAE, MISSOURI BOTANICAL GARDEN, ST. LOUIS, MISSOURI, AUGUST 3-6 1982* (BSR-8207124*); 6 MONTHS \$17,060
 WASHINGTON UNIVERSITY
 SCHAAL, BARBARA A.; *MOLECULAR EVOLUTION IN THE GENUS GAURA* (DEB-8111312); 12 MONTHS \$55,596
 RAVEN, PETER H. AND NEILL, DAVID A.; *DOCTORAL DISSERTATION RESEARCH IN SYSTEMATIC BIOLOGY* (BSR-8120386); 24 MONTHS \$8,721
 SCHAAL, BARBARA A.; *VARIATION OF DNA SEQUENCES IN PLANT POPULATIONS* (DEB-8307090); 12 MONTHS \$45,000

MONTANA

- MONTANA STATE UNIVERSITY
 WARD, DAVID M.; *ANAEROBIC DECOMPOSITION IN HOT SPRING ALGAL-BACTERIAL MATS* (DEB-8023241 A01); 12 MONTHS \$40,795
 UNIVERSITY OF MONTANA
 STARK, NELLIE M.; *XYLEM SAP AS AN INDICATOR OF THE NUTRIENT STATUS OF CONIFERS* (DEB-8108887); 21 MONTHS \$116,132

NEVADA

- UNIVERSITY OF NEVADA, LAS VEGAS
 STARKWEATHER, PETER L.; *TROPHIC ECOLOGY AND POPULATION DYNAMICS OF BRACHIONID ROTIFERS* (DEB-8105724 A01); 12 MONTHS \$60,388

NEW HAMPSHIRE

- DARTMOUTH COLLEGE
 REINERS, WILLIAM A.; *BIOGEOCHEMICAL PROCESSES IN MOUNTAIN FORESTS OF NEW ENGLAND* (DEB-7907346 A03); 12 MONTHS \$70,040
 HOLMES, RICHARD T. AND SCHULTZ, JOHN C.; *THE REGULATION OF HERBIVORY IN NORTHERN HARDWOODS ECOSYSTEMS* (BSR-8022174 A01); 12 MONTHS \$78,356
 GILBERT, JOHN J.; *COMPETITION BETWEEN ROTIFERS AND CRUSTACEANS IN FRESHWATER ZOOPLANKTON COMMUNITIES* (DEB-8119213); 12 MONTHS \$60,000
 GILBERT, JOHN J.; *POLYMORPHISM IN THE ROTIFER ASPLANCHNA SIEBOLDI* (DEB-8121639); 12 MONTHS \$40,079
 UNIVERSITY OF NEW HAMPSHIRE, DURHAM
 BISHOP, PAUL L. AND KINNER, NANCY E.; *DOCTORAL DISSERTATION RESEARCH IN ECOLOGY* (DEB-8114819); 12 MONTHS \$4,450

NEW JERSEY

- FAIRLEIGH DICKINSON UNIVERSITY
 OGDEN, JOHN C.; *EXPANSION AND REFURBISHMENT OF THE SEA WATER SYSTEM OF THE WEST INDIES LABORATORY* (DEB-8209442*); 12 MONTHS \$20,000
 PRINCETON UNIVERSITY
 TERBORGH, JOHN W.; *THE SPATIAL ORGANIZATION OF A TROPICAL FOREST BIRD COMMUNITY* (DEB-8207002); 24 MONTHS \$110,000
 RUTGERS UNIVERSITY-CAMDEN CAMPUS
 GOOD, RALPH E.; *CONFERENCE ON 'ECOLOGICAL SOLUTIONS TO ENVIRONMENTAL MANAGEMENT CONCERNS IN THE PINELANDS NATIONAL RESERVE, NEW JERSEY, APRIL 1982* (DEB-8200529); 7 MONTHS \$10,000
 RUTGERS UNIVERSITY
 PICKETT, STEWARD T.; *RESPONSE OF HERBACEOUS POPULATIONS TO THE CREATION OF GAPS IN DECIDUOUS FOREST* (BSR-8003504 A02); 12 MONTHS \$25,572
 FORMAN, RICHARD T.; *COMMUNITY/ECOSYSTEM STABILITY AND LANDSCAPE CONFIGURATION* (BSR-8004653 A02); 12 MONTHS \$41,255
 MCDOWELL, SAMUEL B. AND CRUMLY, CHARLES R.; *DOCTORAL DISSERTATION RESEARCH IN SYSTEMATIC BIOLOGY* (DEB-8114467); 12 MONTHS \$7,750

NEW MEXICO

- NEW MEXICO INSTITUTE OF MINING AND TECHNOLOGY
 FLOWER, ROUSSEAU H.; *EVOLUTION AND DISTRIBUTION OF EARLY PALEOZOIC NAUTILOIDS* (DEB-7728908 A03); 12 MONTHS \$20,000
 NEW MEXICO STATE UNIVERSITY
 WHITFORD, WALTER G.; *INTERACTIONS OF TIME AND SPACE VARIABILITY IN A CHIHUAHUA DESERT ECOSYSTEM IN NEW MEXICO* (DEB-8114466); 12 MONTHS \$268,131
 UNIVERSITY OF NEW MEXICO
 CATES, REX G.; *PLANT-HERBIVORE COMMUNITY AND POPULATION DYNAMICS* (DEB-7927067 A02); 12 MONTHS \$54,362
 WIENS, JOHN A. AND CATES, REX G.; *PATCH DYNAMICS IN SHRUB-STEPPE ECOSYSTEMS AND THE ROLE OF AVIAN PREDATORS* (BSR-8017445 A01); 12 MONTHS \$158,941
 GOSZ, JAMES R. AND BROOKINS, DOUGLAS G.; *QUANTIFICATION OF ATMOSPHERIC INPUTS WITH STRONTIUM ISOTOPE RATIOS* (DEB-8105538 A01); 12 MONTHS \$106,981
 LIGON, J. D. AND STACEY, PETER B.; *ADAPTIVE SIGNIFICANCE OF CO-OPERATIVE POLYANDRY* (BSR-8105719 A01); 12 MONTHS \$28,664
 TOOLSON, ERIC C.; *WATER RELATIONS AND EPICUTICULAR LIPID COMPOSITION IN DROSOPHILA PSEUDOORSCURA* (DEB-8110857); 12 MONTHS \$45,000
 CRAWFORD, CLIFFORD S. AND TAYLOR, ELSA C.; *CELLULOSE DECOMPOSITION IN DESERT DUNE ECOSYSTEMS* (DEB-8202765); 24 MONTHS \$80,000
 TAYLOR, FRITZ W.; *THEORETICAL ANALYSIS OF THE EVOLUTION OF HIBERNAL DIAPAUSE INDUCTION IN INSECTS* (DEB-8208998); 24 MONTHS \$66,449

NEW YORK

- ADELPHI UNIVERSITY
 LUND, RICHARD; *FOSSIL FISHES FROM THE UPPER MISSISSIPPIAN BEAR GULCH LIMESTONE OF MONTANA* (DEB-7919492 A01); 24 MONTHS \$60,000
 AMERICAN MUSEUM OF NATURAL HISTORY
 SCHUH, RANDALL T.; *CURATORIAL SUPPORT OF COLLECTIONS OF DEPARTMENT OF THE ENTOMOLOGY* (DEB-7921780 A02); 12 MONTHS \$104,481
 MUSSEY, GUY G. AND ANDERSON, SYDNEY; *OPERATIONAL SUPPORT FOR THE MAMMALOGY COLLECTION* (BSR-8021743 A02); 12 MONTHS \$28,100
 COLE, CHARLES J.; *UNISexual SPECIES OF REPTILES* (BSR-8106454*); 12 MONTHS \$29,157

GAFFNEY, EUGENE S; SUPPORT FOR FOSSIL AMPHIBIAN, REPTILE, AND BIRD COLLECTIONS (BSR-8108905 A01); 12 MONTHS \$48,232
 SCHUH, RANDALL T; HISTORICAL BIOGEOGRAPHY AND THE EVOLUTION OF HOST ASSOCIATIONS IN THE PHYLINE PLANT BUGS (DEB-8113481); 36 MONTHS \$47,916

ASSOCIATION OF SYSTEMATICS COLLECTIONS

EDWARDS, STEPHEN R; ANALYSIS OF THE SYSTEMATIC BIOLOGY COMMUNITY (BSR-8112876 A01*); \$14,084

EDWARDS, STEPHEN R; ANALYSIS OF THE SYSTEMATIC BIOLOGY COMMUNITY (BSR-8112876 A02*); 12 MONTHS \$71,214

JENKINSON, MARION A; ANALYSIS OF MUSEUM HOLDINGS OF AVIAN ANATOMICAL SPECIMENS (DEB-8205935); 18 MONTHS \$23,692

CITY COLLEGE

GALLAGHER, JANE C; PHYSIOLOGICAL VARIABILITY AND POPULATION GENETICS OF *SKELETONEMA COGSTATUM*, A PLANKTONIC MARINE DIATOM (BSR-8021744 A01*); 12 MONTHS \$24,900

COLLEGE AT NEW PALTZ

BRENNER, GILBERT J; PALEOEQUATORIAL, EARLY ANGIOSPERM POLLEN FROM THE LOWER CRETACEOUS OF ISRAEL (DEB-8011653 A02); 12 MONTHS \$27,436

COLLEGE OF ENVIRONMENTAL SCIENCE AND FORESTRY

LANIER, GERALD N; BIOSYSTEMATICS OF THE *PISSODES STROBILIPES* COMPLEX (DEB-8201007); 24 MONTHS \$31,860

COLUMBIA UNIVERSITY

BROECKER, WALLACE S, SIMPSON, H JAMES, SANTSCHI, PETER, AND ANDERSON, ROBERT; EXPERIMENTAL ACIDIFICATION OF LAKES (DEB-8017639 A03); 12 MONTHS \$200,000

HAYS, JAMES D, AND ELDERIDGE, NILES; GLOBAL PATTERNS OF EVOLUTION IN THE RADIOLARIAN GENUS *PTEROCANIUM* (DEB-8118745*); 24 MONTHS \$60,158

COLUMBIA UNIVERSITY-LAMONT-DOHERTY GEOLOGICAL OBSERVATORY

HEUSSER, LINDA E; QUATERNARY PALEOECOLOGY OF NORTH COASTAL CALIFORNIA (BSR-8109916 A01); 12 MONTHS \$34,385

CORNELL UNIVERSITY

FEENEY, PAUL P; COMPARATIVE POPULATION AND CHEMICAL ECOLOGY OF HERBIVOROUS INSECTS (BSR-7922130 A02); 12 MONTHS \$58,446

PIMENTEL, DAVID; GENETIC FEEDBACK INTERACTIONS IN PARASITE-HOST SYSTEMS (DEB-8010912 A02); 12 MONTHS \$47,951

TAUBER, MAURICE J, AND TAUBER, CATHERINE A; GENETICS OF INSECT DIAPAUSE (BSR-8020988 A01); 12 MONTHS \$44,178

SHERMAN, PAUL W; KINSHIP, DEMOGRAPHY, AND MAMMALIAN NEPOTISM (BNS-8105285 A01*); 12 MONTHS \$27,461

LIKENS, GENE E; COLLABORATIVE RESEARCH ON HYDROLOGIC-NUTRIENT CYCLE INTERACTIONS IN SMALL UNDISTURBED AND MANIPULATED ECOSYSTEMS (DEB-8109669 A01); 12 MONTHS \$233,516

BRUSSARD, PETER F; SYSTEMATICS OF NEARCTIC EUPHYDRYAS (DEB-8116332); 24 MONTHS \$76,102

BRUSSARD, PETER F; SYSTEMATICS OF NEARCTIC EUPHYDRYAS (DEB-8116332 A01); \$7,050

BROWN, WILLIAM L, AND DARLING, D CHRISTO; DOCTORAL DISSERTATION RESEARCH IN SYSTEMATIC BIOLOGY (DEB-8117332); 24 MONTHS \$3,125

MILLS, EDWARD L; PREDATION BY YOUNG FISH ON ZOOPLANKTON (DEB-8118415); 24 MONTHS \$64,917

NIKLAS, KARL J; COLLABORATIVE RESEARCH - PALEOBIOCHEMISTRY AND ULTRASTRUCTURE OF FOSSIL ANGIOSPERMS (DEB-8118416); 12 MONTHS \$42,588

NIKLAS, KARL J; AERODYNAMIC CORRELATIONS AMONG POLLEN AND OVULATE CONE MORPHOLOGIES OF CONIFER SPECIES (DEB-8118749); 24 MONTHS \$60,000

ROOT, RICHARD B; STRUCTURE OF PLANT-ARTHROPOD ASSOCIATIONS (DEB-8120053); 12 MONTHS \$99,245

GULLEDGE, JAMES L; CURATORIAL SUPPORT OF THE ORNITHOLOGICAL COLLECTION OF THE LIBRARY OF NATURAL SOUNDS (DEB-8121922); 24 MONTHS \$99,514

LIKENS, GENE E, BORMANN, F HERBERT, AND PIERCE, ROBERT S; SUPPORT OF THE HUBBARD BROOK EXPERIMENTAL FOREST AS A NATIONAL FIELD RESEARCH FACILITY (DEB-8122050); 12 MONTHS \$86,500

DUXBURY, JOHN M; METHODS FOR ESTIMATING DENITRIFICATION AND TOTAL GASEOUS N LOSS FROM SOILS (DEB-8204981); 12 MONTHS \$49,878

RABINOWITZ, DEBORAH; MECHANISMS OF PERSISTENCE IN SPARSE PRAIRIE GRASSES (DEB-8211500); 12 MONTHS \$71,100

CORNELL UNIVERSITY-CORNELL UNIVERSITY - ENDOWED

EMLEN, STEPHEN T; FIELD STUDY OF COOPERATIVE BEHAVIOR (BNS-7924436 A02*); 12 MONTHS \$29,745

LEVIN, SIMON A; MATHEMATICAL THEORIES OF POPULATION DYNAMICS AND COMMUNITY STRUCTURE (MCS-8001618 A02*); 12 MONTHS \$6,000

CORNELL UNIVERSITY-CORNELL UNIVERSITY - STATE

HAUSFATER, GLENN; LONGITUDINAL STUDIES OF PRIMATE SOCIETIES (BSR-8007893 A02*); 12 MONTHS \$14,000

HAUSFATER, GLENN; LONGITUDINAL STUDIES OF PRIMATE SOCIETIES (BNS-8007893 A02*); 12 MONTHS \$14,998

WHALEN, MICHAEL D; SYSTEMATIC STUDIES OF *SOLANUM SUBGENUS LEPTOSTEMONUM* (DEB-8081440 A01); 12 MONTHS \$31,894

BATES, DAVID M, AND UHL, NATALIE W; STUDIES TOWARD A GENERA *PALMARUM* (BSR-8108974 A01); 12 MONTHS \$50,501

MARKS, PETER L; PLANT INVASION, REGENERATION, AND NICHE STRUCTURE IN OLD FIELD COMMUNITIES (DEB-8121548); 24 MONTHS \$54,833

NEW YORK BOTANICAL GARDEN-CAREY ARBORETUM

JONES, CLIVE G; COLLABORATIVE RESEARCH ON THE CHEMICAL ECOLOGY OF LUBBER GRASSHOPPERS (DEB-8117943); 12 MONTHS \$29,000

NEW YORK BOTANICAL GARDEN

STEERE, WILLIAM C; MOSSES OF ARCTIC NORTH AMERICA: A MONOGRAPHIC TREATMENT (DEB-7724050 A04); 12 MONTHS \$20,800

HOLMGREN, PATRICIA; SUPPORT OF THE SYSTEMATIC COLLECTIONS (DEB-7824322 A03); 12 MONTHS \$175,000

LONG, CHARLES R; A MODERN BIBLIOGRAPHY OF THE LITERATURE OF SYSTEMATIC BOTANY (BSR-8007704 A02); 12 MONTHS \$19,572

BUCK, WILLIAM R; A MOSS FLORA OF THE WEST INDIES I. THE GREATER ANTILLES AND THE PLASIOCARPOUS MOSSES (BSR-8021739 A01); 12 MONTHS \$31,639

PRANCE, GHILLEAN T; PROJETO FLORA AMAZONICA PHASE III (DEB-8106632 A01); \$146,521

HOLMGREN, NOEL H; RESEARCH ON SCROPHULARIACEAE (EXCEPT CALCEOLARIA) FOR FLORA OF ECUADOR (DEB-8117735); 6 MONTHS \$5,315

KOYAMA, TETSUO M; A TAXONOMIC MONOGRAPH OF THE RHYNCHOSPORA-RHYNCHOSPORINAE OF CYPERACEAE (DEB-8119794); 24 MONTHS \$74,979

LUTEYN, JAMES L, AND CLEMANTS, STEVEN E; DOCTORAL DISSERTATION RESEARCH IN SYSTEMATIC BIOLOGY (DEB-8119316); 12 MONTHS \$5,000

BARNEY, RUPERT C; REVISION OF *MIMOSA* (MIMOSACEAE) OF THE BRAZILIAN PLANALTO (DEB-8203352); 12 MONTHS \$34,233

MICKEL, JOHN T; PTERIDOPHYTE FLORA OF HISPANIOLA (DEB-8209356); 36 MONTHS \$111,398

HOLMGREN, PATRICIA; MICROSCOPES FOR VISITORS USING THE SYSTEMATICS COLLECTIONS AT NEW YORK BOTANICAL GARDEN (DEB-8211501); 6 MONTHS \$14,800

NEW YORK UNIVERSITY

DOWLING, HERNDON G, AND PYTEL, BARBARA A; DOCTORAL DISSERTATION RESEARCH IN SYSTEMATIC BIOLOGY (DEB-8112469); 12 MONTHS \$1,405

DOWLING, HERNDON G, AND ANDERSON, KAREN; DOCTORAL DISSERTATION RESEARCH IN SYSTEMATIC BIOLOGY (DEB-8209935); 12 MONTHS \$3,506

SIENA COLLEGE

FRASER, DOUGLAS F; ORGANIZATION OF PATTERN IN HABITAT USE BY MINNOWS (DEB-8116001); 24 MONTHS \$37,985

STATE UNIVERSITY AT ALBANY

PULLIAM, H RONALD; FEEDING PREFERENCES, RESOURCE PARTITIONING, AND THE COEXISTENCE OF SPECIES (DEB-8013017 A01*); 24 MONTHS \$65,152

BROWN, JERRAM L; AID-GIVING WITHIN GROUPS (BNS-8115589*); 12 MONTHS \$22,998

KOEHN, RICHARD K; A SYMPOSIUM ON 'EVOLUTION OF GENES AND PROTEINS', SUNY-STONY (DEB-8118404); 6 MONTHS \$3,000

STEWART, MARGARET M, AND TOWNSEND, DANIEL S; DOCTORAL DISSERTATION RESEARCH IN POPULATION BIOLOGY (DEB-8202366); 4 MONTHS \$2,214

STATE UNIVERSITY AT BINGHAMTON

JAENIKE, JOHN; DETERMINANTS OF HOST PREFERENCE IN PHYTOPHAGOUS INSECTS (DEB-8008574 A01); 12 MONTHS \$32,500

JENSEN, ROY A; ENZYMOLOGICAL PATTERNING: INDICATOR OF BIOCHEMICAL PHYLOGENY (DEB-8208956); 12 MONTHS \$44,136

STATE UNIVERSITY AT STONY BROOK

KOEHN, RICHARD K; BIOCHEMICAL, PHYSIOLOGICAL AND GENETIC ANALYSES OF ADAPTATION IN *MYTILUS EDULIS* (BSR-7908663 A03); 12 MONTHS \$67,549

SOKAL, ROBERT R; STABILITY OF NUMERICAL CLASSIFICATIONS (BSR-8003508 A01); 12 MONTHS \$50,110

BENTLEY, BARBARA L; INTERACTIONS BETWEEN NITROGEN-FIXING MICROORGANISMS AND HIGHER PLANTS IN TROPICAL RAINFORESTS (DEB-8010678 A01); 12 MONTHS \$50,346

SOKAL, ROBERT R; GEOGRAPHIC VARIATION IN PEMPHIGUS (BSR-8011391 A02); 12 MONTHS \$61,000

EVANS, WALTER F; POPULATION AND BIOCHEMICAL GENETICS OF *D. MELANOGASTER GAPDH* (DEB-8106630 A01); 12 MONTHS \$45,992

BELL, MICHAEL A; ESTIMATES OF EVOLUTIONARY RATES AMONG FOSSILS (DEB-8111013); 12 MONTHS \$87,105

ROHLF, F JAMES; IMAGE PROCESSING IN TAXONOMY (BSR-8205569); 12 MONTHS \$40,000

CONOVER, DAVID O; TEMPERATURE-DEPENDENT SEX DETERMINATION IN THE ATLANTIC SILVERSIDES AND OTHER FISHES (DEB-8204682); 24 MONTHS \$60,000

SYRACUSE UNIVERSITY

MCNAUGHTON, SAM J; INTERACTIVE PROCESSES IN A GRAZING ECOSYSTEM (DEB-7993991 A01); 12 MONTHS \$27,652

STARMER, WILLIAM T; A COLLABORATIVE RESEARCH ON THE YEAST FLORA ASSOCIATED WITH *OPUNTIA* CACTI (BSR-8108679 A01); 12 MONTHS \$41,000

STARMER, WILLIAM T. POPULATION GENETICS OF *DROSOPHILA* IN RELATIONSHIP TO DIFFERENT HOST PLANTS AND MICROORGANISMS (BSR-8104772); 12 MONTHS \$35,000

BELSKY, A. J. TROPICAL GRASSLAND ECOSYSTEMS: VEGETATIONAL PATTERN AND COMMUNITY ORGANIZATION (DEB-8114906); 18 MONTHS \$50,956

DRISCOLL, CHARLES T. ALUMINUM-LIGAND INTERACTIONS IN A FORESTED ECOSYSTEM (DEB-8105986); 24 MONTHS \$159,916

UNIVERSITY OF ROCHESTER

SELANDER, ROBERT K. ECOLOGICAL POPULATION GENETICS (DEB-7832363 A02); 12 MONTHS \$67,700

UTICA COLLEGE OF SYRACUSE UNIVERSITY

GOTWALD, WILLIAM H. A TAXONOMIC REVISION OF THE GENUS *AENICTUS* (DEB-8113774); 24 MONTHS \$32,000

NORTH CAROLINA

DUKE UNIVERSITY

STONE, DONALD E. SYSTEMATIC STUDIES ON THE DIVERSIFICATION OF ANGIOSPERM POLLEN (DEB-7724613 A04); 12 MONTHS \$40,778

ANTONOVICS, JANIS, AND MEAGHER, THOMAS. GENETIC PROCESSES WITHIN A POPULATION OF *CHAMAELIRIUM LUTRUM* (LILIACEAE) (DEB-7904737 A02); 24 MONTHS \$75,000

WILBUR, HENRY M. EXPERIMENTAL STUDIES OF AMPHIBIAN COMMUNITIES (DEB-7911539 A02); 12 MONTHS \$46,432

LIVINGSTONE, DANIEL A. DETAILED TROPICAL RECORDS OF GLOBAL CLIMATIC CHANGE (ATM-800516 A07*); 12 MONTHS \$75,000

SIMONS, ELWYN L. SUPPORT FOR THE CENTER FOR THE STUDY OF PRIMATE BIOLOGY AND HISTORY (DEB-8009675 A02); 12 MONTHS \$114,674

RAUSHER, MARK D. ECOLOGICAL AND EVOLUTIONARY INTERACTIONS IN A SIMPLE PLANT-INSECT ASSOCIATION (BSR-8016414 A01); 12 MONTHS \$44,963

STRAIN, BOYD R. CONTINUATION OF PHYTOTRON OPERATIONS (DEB-8021318 A01); \$170,000

ANTONOVICS, JANIS. THE ECOLOGICAL SIGNIFICANCE OF GENETICALLY VARIABLE PROGENY (BSR-8022369 A01); 12 MONTHS \$39,000

BILLINGS, WILLIAM D. ARCTIC TUNDRA: A SOURCE OR SINK FOR ATMOSPHERIC CARBON DIOXIDE IN A CHANGING ENVIRONMENT (DEB-8154390 A01); 12 MONTHS \$82,018

STONE, DONALD E. ECOSYSTEM DYNAMICS OF A TROPICAL FOREST (DEB-8114546); 18 MONTHS \$100,000

STONE, DONALD E. GROUP TRAVEL FOR U.S. PARTICIPANTS IN AN INTERNATIONAL SYMPOSIUM ON TROPICAL RAIN FORESTS, LEEDS, UNITED KINGDOM, 14-18 APRIL 1983 (BSR-8117589); 9 MONTHS \$8,900

CULBERSON, WILLIAM L. AND CULBERSON, CHICITA F. MONOGRAPHIC AND BIOSYSTEMATIC STUDIES ON THE RED-FRUITED CLADONIAE (ASCOCYCETES) (DEB-8119114); 24 MONTHS \$99,996

STRAIN, BOYD R. DIRECT EFFECTS OF INCREASING GLOBAL CARBON DIOXIDE CONCENTRATION ON PLANTS (DEB-8119442); 12 MONTHS \$150,000

SIMONS, ELWYN L. RESEARCH ON *TARSIVUS*: PHYLETIC AFFINITIES, KARYOLOGY, BIOCHEMISTRY, ANATOMY, AND CAPTIVE BEHAVIOR (BNS-8120549*); 12 MONTHS \$5,000

WHITE, RICHARD A. AND DICKISON, WILLIAM C. A SYMPOSIUM ON CONTEMPORARY PROBLEMS IN PLANT ANATOMY, DURHAM NORTH CAROLINA, FEBRUARY 28 - MARCH 3, 1983 (DEB-8107785); 12 MONTHS \$11,913

DUKE UNIVERSITY-MARINE LABORATORY

RAMUS, JOSEPH S. AND DUKE, CLIFFORD S. DOCTORAL DISSERTATION RESEARCH IN POPULATION BIOLOGY (DEB-8121890); 21 MONTHS \$2,425

MCKAYE, KENNETH R. COMMUNITY AND BEHAVIORAL ECOLOGY OF CICHLID FISHES (DEB-8141696); 12 MONTHS \$61,346

COSTLOW, JOHN D. SUPPORT OF FIELD RESEARCH FACILITIES AT DUKE UNIVERSITY MARINE LABORATORY (DEB-8109422*); 12 MONTHS \$10,000

NORTH CAROLINA STATE MUSEUM

SHELLEY, ROWLAND M. SYSTEMATIC STUDIES IN THE MILLIPED FAMILY XYSTODESMIDAE (POLYDESMIDA). PART II (DEB-8100556); 36 MONTHS \$23,462

NORTH CAROLINA STATE UNIVERSITY AT RALEIGH

TRIANAPHYLLOU, A. C. CYTOLOGICAL STUDIES IN THE NEMATODE SUPERFAMILY HETERODERMOIDEA (DEB-7917386 A02); 12 MONTHS \$42,227

HARDIN, JAMES W. AND JOHNSON, GEORGE P. DOCTORAL DISSERTATION RESEARCH IN SYSTEMATIC BIOLOGY (DEB-8109423); 24 MONTHS \$5,233

UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL

GENSEL, PATRICIA G. EARLY AND MIDDLE DEVONIAN PLANTS (DEB-801705 A02); 12 MONTHS \$27,985

OLIVE, LINDSAY S. ISOLATION AND INVESTIGATION OF SIMPLE MYCETOZOANS (DEB-8014045 A02); 12 MONTHS \$50,547

RIEGER, REINHARD M. MICROANATOMY AT THE ULTRASTRUCTURE LEVEL IN ACOLIMATE BILATERIA (DEB-8119652); 24 MONTHS \$104,945

REICE, SETH R. STOCHASTIC PROCESSES AND BIOLOGICAL INTERACTIONS IN A WOODLAND STREAM COMMUNITY (BSR-8106910); 24 MONTHS \$100,021

VITOUSEK, PETER M. NITROGEN AND PHOSPHORUS TRANSFORMATIONS IN INTENSIVELY MANAGED LOBLOLLY PINE PLANTATIONS (DEB-8107107); 24 MONTHS \$110,280

NORTH DAKOTA

UNIVERSITY OF NORTH DAKOTA MAIN CAMPUS

LIEBERMAN, DIANA, AND LIEBERMAN, MILTON. TREE GROWTH RATES, AGE-SIZE RELATIONSHIPS, AND TROPICAL FOREST DYNAMICS (DEB-8117507 A01); 12 MONTHS \$52,771

LA DUKE, JOHN C. SYSTEMATICS OF SPHAERALCEA SECTION FENDLERIANAE (DEB-8121906); 24 MONTHS \$59,996

OHIO

BOWLING GREEN STATE UNIVERSITY

WOODRUFF, RONNY C. MAINTENANCE OF A *DROSOPHILA* MELANOGASTER STOCK CENTER (DEB-8005945 A02); 12 MONTHS \$85,000

WOODRUFF, RONNY C. GENETIC CONTROL OF SPONTANEOUS MUTATION (DEB-8117067); 31 MONTHS \$26,000

KENT STATE UNIVERSITY

WICKSTROM, CONRAD E. ECOLOGY AND CHARACTERIZATION OF BACTERIAL NITROGEN FIXATION IN THERMAL SPRINGS (DEB-8118962); 18 MONTHS \$20,000

MIAMI UNIVERSITY CENTRAL OFFICE

KAPUSTKA, LAWRENCE A. ASYMBIOTIC DINITROGEN FIXATION (DEB-8004172 A02); 12 MONTHS \$22,408

MATTOX, KARL R. AND STEWART, KENNETH D. COMPARATIVE CYTOLOGICAL STUDIES IN THE GREEN ALGAE (DEB-8103489 A01); 12 MONTHS \$26,549

GUTTMAN, SHELDON I. GUTTMAN, SHELDON I. AND NICKRENT, DANIEL L. DOCTORAL DISSERTATION RESEARCH IN SYSTEMATIC BIOLOGY (DEB-8117446); 18 MONTHS \$6,113

GUTTMAN, SHELDON I. AND WOODS, PAUL E. DOCTORAL DISSERTATION RESEARCH IN SYSTEMATIC BIOLOGY (DEB-8106801); 12 MONTHS \$4,463

GUTTMAN, SHELDON I. AND ROMANO, MICHAEL A. DOCTORAL DISSERTATION RESEARCH IN POPULATION BIOLOGY (DEB-8108377); 12 MONTHS \$2,613

OHIO STATE UNIVERSITY

FLOYD, GARY L. COMPARATIVE CYTOLOGY OF SELECTED CHLOROPHYTES (DEB-7911777 A02); 12 MONTHS \$26,590

TAYLOR, THOMAS N. ULTRASTRUCTURE OF FOSSIL POLLEN AND SPORES (DEB-8001803 A02); 12 MONTHS \$50,482

DEAN, DONALD H. MAINTENANCE OF THE *BACILLUS* GENETIC STOCK CENTER (DEB-8008386 A02); 12 MONTHS \$51,212

CRAWFORD, DANIEL J. COLLABORATIVE RESEARCH ON A MONOGRAPHIC STUDY OF THE GENUS *COREOPSIS* (COMPOSITAE) (DEB-8011655 A02); 12 MONTHS \$35,893

COLINVAUX, PAUL A. AMERICAN LAKES: COMPARATIVE AND PALEOLIMNOLOGICAL ANALYSES TO TEST HYPOTHESES (BSR-8011559 A01); 12 MONTHS \$80,000

FUERST, PAUL A. STATISTICAL STUDIES OF THE GENETIC EFFECTS CAUSED BY POPULATION BOTTLENECKS (DEB-8110290); 12 MONTHS \$32,308

CRAWFORD, DANIEL J. AND BAYER, RANDALL J. DOCTORAL DISSERTATION RESEARCH IN SYSTEMATIC BIOLOGY (DEB-8103358); 24 MONTHS \$4,285

O'KELLY, CHARLES J. THE SYSTEMATICS AND EVOLUTION OF THE ULOTRICHIALES (CHLOROPHYTES) (DEB-8100361); 24 MONTHS \$34,217

JOHNSON, NORMAN F. SYSTEMATICS OF EGG PARASITOIDS OF THE SUBFAMILY TELENOINAE (HYMENOPTERA: SCALIONIDAE) (DEB-8101082); 24 MONTHS \$55,000

COLINVAUX, PAUL A. ENVIRONMENT AND CLIMATE OF THE AMERICAN EQUATOR SINCE 18K (DEB-8103658*); 12 MONTHS \$46,871

CRAWFORD, DANIEL J. MONOGRAPHIC STUDY OF THE GENUS *COREOPSIS* (COMPOSITAE) (DEB-8104073); 24 MONTHS \$13,880

CRAWFORD, DANIEL J. AND FILATOWSKI, RONALD E. DOCTORAL DISSERTATION RESEARCH IN SYSTEMATIC BIOLOGY (DEB-8110808); 24 MONTHS \$5,115

OHIO UNIVERSITY

LLOYD, ROBERT M. SYSTEMATIC RELATIONSHIPS AND MATING SYSTEM PARAMETERS IN FERNS (DEB-7905079 A02); 12 MONTHS \$13,826

UNIVERSITY OF CINCINNATI

KANE, THOMAS C. COLLABORATIVE STUDIES ON EVOLUTIONARY PATTERNS IN CAVERNICOLOUS AND MONTANE CARABID BEETLES (DEB-8102273); 24 MONTHS \$54,997

OKLAHOMA

UNIVERSITY OF OKLAHOMA NORMAN CAMPUS-BIOLOGICAL STATION

THRELKELD, STEPHEN T. CLADOCERAN ZOOPLANKTON SUCCESSION (DEB-8021163 A01); 12 MONTHS \$46,349

UNIVERSITY OF OKLAHOMA NORMAN CAMPUS

SKVARLA, JOHN J. POLLEN MORPHOLOGICAL STUDIES IN THE FAMILY ONAGRACEAE AND ORDER MYRTALES (BSR-8008345 A02); 12 MONTHS \$22,775

MATTHEWS, WILLIAM J. AND HILL, LOREN G. INFLUENCES OF PHYSICO-CHEMICAL TOLERANCE ON THE ZOOGEOGRAPHIC AND LOCAL DISTRIBUTIONS OF FRESHWATER FISH (DEB-8023659 A01); 12 MONTHS \$22,000

MOCK, DOUGLAS W. ECOLOGICAL DETERMINANTS OF AGGRESSION AMONG GENETICALLY RELATED INDIVIDUALS (DEB-8101537*); 24 MONTHS \$55,000

ESTES, JAMES R. AND SULLIVAN, JANET R. DOCTORAL DISSERTATION RESEARCH IN SYSTEMATIC BIOLOGY (DEB-8205749; 12 MONTHS \$5,077)

ESTES, JAMES R. AND BRANDENBURG, DAVID M. DOCTORAL DISSERTATION RESEARCH IN SYSTEMATIC BIOLOGY (DEB-8206286; 24 MONTHS \$5,689)

THRELKELD, STEPHEN T. COLLABORATIVE RESEARCH ON IMPACT OF FILTER-FEEDING FISH ON PHYTOPLANKTON COMMUNITY STRUCTURE (DEB-8206865; 24 MONTHS \$35,000)

OREGON

OREGON STATE UNIVERSITY

TRAPPE, JAMES M. AND GORDON, JOHN C. TEMPERATURE AND MOISTURE EFFECTS ON MYCORRHIZAE IN A DOUGLAS-FIR ECOSYSTEM (BSR-7824443 A03; 12 MONTHS \$65,012)

WARING, RICHARD H. OPERATION OF THE H.J. ANDREWS EXPERIMENTAL FOREST AS A NATIONAL FIELD RESEARCH FACILITY (DEB-7925929 A02; 12 MONTHS \$163,915)

ANDERSON, NORMAN H. UTILIZATION OF SMALL WOOD DEBRIS BY INVERTEBRATES IN STREAM SYSTEMS (BSR-8022190 A01; 12 MONTHS \$37,660)

ZOBEL, DONALD B. SURVIVAL AND RECOVERY OF FOREST SPECIES FOLLOWING TEPHRA DEPOSITION (DEB-8109906; 30 MONTHS \$83,399)

WARING, RICHARD H. STRESS-INDUCED WAVE MORTALITY IN SUB-ALPINE FOREST ECOSYSTEMS (DEB-8111015; 12 MONTHS \$87,420)

CUMMINS, KENNETH W. ROLE OF RIPARIAN VEGETATION IN THE METABOLISM AND STRUCTURE OF STREAM ECOSYSTEMS (BSR-8112455; 12 MONTHS \$373,013)

KRANTZ, GERALD W. SYSTEMATICS OF MITES OF THE GENUS MACROCHELES LATREILLE (DEB-8120886; 12 MONTHS \$39,789)

SOLLINS, PHILLIP. NATURAL ABUNDANCE OF ^{15}N AS A TRACER OF BIOLOGICALLY-FIXED NITROGEN (DEB-8205620; 12 MONTHS \$30,354)

SWANSON, FREDERICK J. WORKSHOPS ON ECOSYSTEM STUDIES AT MOUNT ST. HELENS, WASHINGTON: 1982 AND 1983 (DEB-8207208; 24 MONTHS \$13,023)

UNIVERSITY OF OREGON - EUGENE

CASTENHOLZ, RICHARD W. ECOLOGY AND PHYSIOLOGY OF THE PHOTOSYNTHETIC MICROORGANISMS OF HOT SPRINGS (DEB-8111021; 24 MONTHS \$120,000)

BRADSHAW, WILLIAM E. POPULATION BIOLOGY AND LIFE-HISTORY PATTERNS IN THE MOSQUITO, *WYOMYIA SMITHII* (DEB-8114953; 12 MONTHS \$24,000)

PENNSYLVANIA

ACADEMY OF NATURAL SCIENCES OF PHILADELPHIA

BOTT, THOMAS L. DISSOLVED ORGANIC MATTER UTILIZATION AND BACTERIAL PRODUCTIVITY IN A STREAM SYSTEM (BSR-7921963 A03; 12 MONTHS \$71,891)

BOTT, THOMAS L. DISSOLVED ORGANIC MATTER UTILIZATION AND BACTERIAL PRODUCTIVITY IN A STREAM SYSTEM (DEB-7921963 A04; 2 MONTHS \$7,570)

DAVIS, GEORGE M. AND ROBERTSON, ROBERT. CURATION, IMPROVEMENT AND SERVICE FUNCTIONS OF A MAJOR COLLECTION OF RECENT MOLLUSCA (DEB-8001822 A02; 12 MONTHS \$42,040)

SMITH-VANIZ, WILLIAM F. SUPPORT OF THE ACADEMY'S FISH COLLECTION (DEB-8003205 A02; 12 MONTHS \$49,490)

UZZELL, THOMAS M. EVOLUTION OF MITOCHONDRIAL DNA AND SERUM ALBUMIN IN AMPHIBIANS AND REPTILES (DEB-8111397; 12 MONTHS \$59,376)

DAVIS, GEORGE M. MULTIDISCIPLINARY SYSTEMATIC AND TAXONOMIC ANALYSES OF NORTH AMERICAN UNIONACEA (DEB-8111893; 12 MONTHS \$40,000)

DAVIS, GEORGE M. FAUNAL SURVEY OF HYDROBIOID SNAILS OF SOUTHERN SOUTH AMERICA (DEB-8205827; 36 MONTHS \$100,000)

REIMER, CHARLES W. CURATION OF THE DIATOM COLLECTIONS OF THE ACADEMY OF NATURAL SCIENCES OF PHILADELPHIA (DEB-8207865; 36 MONTHS \$112,183)

BUCKNELL UNIVERSITY

ABRAHAMSON, WARREN G. THE GOLDENROD-STEM GALL MAKER-PARASITOID INTERACTION (DEB-8205856; 12 MONTHS \$41,000)

CARNEGIE INSTITUTE

UTECH, FREDERICK H. REORGANIZATION AND UPDATING OF THE VASCULAR PLANT COLLECTION OF CARNEGIE MUSEUM OF NATURAL HISTORY (DEB-8005288 A02; 12 MONTHS \$30,000)

GENOWAYS, HUGH H. REORGANIZATION OF THE RECENT MAMMAL COLLECTIONS OF CARNEGIE MUSEUM OF NATURAL HISTORY (DEB-8111553 A01; 12 MONTHS \$35,500)

DICKINSON COLLEGE

CALABRESE, DIANE M. ANALYSIS OF TAXONOMIC CONGRUENCE FOR THE INSECT FAMILY GERRIDAE (HEMIPTERA: HETEROPTERA) (DEB-8116763; 24 MONTHS \$20,000)

PENNSYLVANIA STATE UNIVERSITY

WRIGHT, JAMES E. EVOLUTIONARY RESTRUCTURING OF THE GENOMES OF SELECTED SALMONID SPECIES (DEB-8120149; 24 MONTHS \$79,000)

PEARSON, DAVID L. AND JULIANO, STEVEN A. DOCTORAL DISSERTATION RESEARCH IN ECOLOGY (DEB-8206054; 24 MONTHS \$5,000)

UNIVERSITY OF PENNSYLVANIA

JANZEN, DANIEL H. IMPACT OF HERBIVORY ON LOCAL DENSITY AND DISTRIBUTION OF DECIDUOUS FOREST TREES (DEB-8011558 A02; 12 MONTHS \$90,000)

RICKLEFS, ROBERT E. ALLOCATION OF TIME AND ENERGY EXPENDITURES IN RELATION TO ECOLOGICAL, NUTRITIONAL AND METABOLIC REQUIREMENTS (DEB-8021732 A01; \$9,000)

RICKLEFS, ROBERT E. ALLOCATION OF TIME AND ENERGY EXPENDITURES IN RELATION TO ECOLOGICAL, NUTRITIONAL AND METABOLIC REQUIREMENTS (DEB-8021732 A02; 12 MONTHS \$47,500)

DUNHAM, ARTHUR E. LONG-TERM VARIATION IN LIFE HISTORY, DEMOGRAPHY AND ENERGY BUDGETS OF TWO IGUANID SPECIES (DEB-8104690 A01; 12 MONTHS \$33,000)

RHODE ISLAND

BROWN UNIVERSITY

WAAGE, JONATHAN K. BEHAVIORAL STRATEGIES IN GENETIC TRANSMISSION IN *ODONTOMELA* (DEB-8004282 A01; 12 MONTHS \$14,000)

MORSE, DOUGLASS H. FORAGING ECOLOGY (DEB-8118105; 24 MONTHS \$67,000)

BERTNESS, MARK D. THE ROLE OF MARSH MUSSELS IN THE PRODUCTIVITY AND STABILITY OF NEW ENGLAND SALT MARSHES (DEB-8205747; 12 MONTHS \$43,000)

KAREIVA, PETER M. THE ROLE OF DISPERSAL IN THE DYNAMICS OF THE PLANT-INSECT ASSOCIATION (DEB-8207117; 24 MONTHS \$59,999)

UNIVERSITY OF RHODE ISLAND

SHEATH, ROBERT G. SYSTEMATICS OF BANGIA (RHODOPHYTA) IN NORTH AMERICA (DEB-8011554 A01; \$2,100)

SOUTH CAROLINA

CLEMSON UNIVERSITY

RUPPERT, EDWARD E. COMPARATIVE ULTRASTRUCTURE OF THE NEMERTINE CIRCULATORY SYSTEM (DEB-8120409; 24 MONTHS \$59,970)

UNIVERSITY OF GEORGIA-SAVANNAH RIVER ECOLOGY LABORATORY

GIBBONS, J. W. THE INFLUENCE OF ENVIRONMENTAL FACTORS OF LIFE HISTORY CHARACTERISTICS (DEB-7904758 A02; 12 MONTHS \$28,021)

UNIVERSITY OF SOUTH CAROLINA AT COLUMBIA

VERNBERG, F. JOHN, DAME, RICHARD F. KJERFVE, BJORN, MCKELLAR, HENRY, AND SPURRIER, JOHN D. MECHANISMS OF COUPLING BETWEEN THE WATER COLUMN AND INTERTIDAL REGIONS IN A SOUTH-EASTERN ESTUARINE ECOSYSTEM (DEB-8119752; 12 MONTHS \$211,377)

VERNBERG, F. JOHN. ACQUISITION OF EQUIPMENT FOR BARUCH FIELD LABORATORY (BSR-8209103; 12 MONTHS \$5,000)

TENNESSEE

DEPARTMENT OF ENERGY-OAK RIDGE OPERATIONS OFFICE

EMANUEL, WILLIAM R. AND SOLOMON, ALLEN M. TERRESTRIAL ECOSYSTEMS, CLIMATE, AND THE GLOBAL CARBON CYCLE (DEB-8115316 A01; 12 MONTHS \$449,550)

EAST TENNESSEE STATE UNIVERSITY

JOHNSON, DAN M. COLLABORATIVE RESEARCH ON THE COEXISTENCE OF LITTORAL ODONATA (DEB-8104435 A01; 12 MONTHS \$41,500)

OAK RIDGE NATIONAL LABORATORY

SHUGART, H. H. EXTENDING SYSTEMS ANALYSIS IN ECOLOGY (DEB-8021024 A01; 12 MONTHS \$449,776)

ELWOOD, J. W. AND WINKLE, W. V. MATERIAL SPIRALLING IN STREAM ECOSYSTEMS (DEB-8105181 A01; 12 MONTHS \$306,261)

UNIVERSITY OF TENNESSEE AT KNOXVILLE

RICHERT, SUSAN E. GENETIC AND EVOLUTIONARY EFFECTS OF COMPETITIVE INTERACTIONS (BSR-8002882 A02; 12 MONTHS \$40,000)

DELCOURT, PAUL A. AND DELCOURT, HAZEL E. FOREST MAPPING ACROSS EASTERN NORTH AMERICA FROM (BSR-8004168 A02; 12 MONTHS \$74,988)

WALNE, PATRICIA L. BIOSYSTEMATICS OF EULENOID FLAGELLATES (DEB-8208401; 12 MONTHS \$45,000)

VANDERBILT UNIVERSITY

POLIS, GARY A. DESERT SCORPION COMMUNITIES (DEB-8116178; 12 MONTHS \$29,482)

TEXAS

NORTH TEXAS STATE UNIVERSITY

STEWART, KENNETH W. LARVAE OF NORTH AMERICAN STONEFLY GENERA (BSR-7812565 A04; 12 MONTHS \$28,905)

RICE UNIVERSITY

HARCOMBE, P. A. DEMOGRAPHIC ANALYSIS OF TREE POPULATIONS (BSR-7923150 A02; 12 MONTHS \$39,892)

STRASSMANN, JOAN E. EVOLUTIONARY BIOLOGY OF POLISTES WASPS (DEB-8117682; 24 MONTHS \$70,000)

TEXAS A & M UNIVERSITY

PRICE, H. JAMES. NUCLEAR DNA CONTENT VARIATION IN MICROSERIS DOUGLASSII (BSR-8009427 A01; 12 MONTHS \$31,150)

GREENBAUM, IRA F. AND SCHMIDLY, DAVID J. COLLABORATIVE RESEARCH IN CHROMOSOMAL AND BIOCHEMICAL DIFFERENTIATION IN PEROMYSCUS: SYSTEMATICS AND EVOLUTION OF THE P. BOYLI GROUP (DEB-8117447; 36 MONTHS \$120,006)

WILSON, HUGH D; GENETIC VARIATION AND SYSTEMATIC RELATIONSHIPS IN CHENOPODIUM (DEB-8307180); 24 MONTHS \$65,000

TEXAS CHRISTIAN UNIVERSITY

DRENNER, RAY W; COLLABORATIVE RESEARCH ON IMPACT OF FILTER-FEEDING FISH ON PHYTOPLANKTON COMMUNITY STRUCTURE (DEB-8206350); 24 MONTHS \$50,000

UNIV OF TEXAS AT AUSTIN

SZANISZLO, PAUL J; SIDEROPHORE PRODUCTION BY MYCORRHIZAL FUNGI (DEB-7911276 A04); \$11,641

STAAR, RICHARD C; OPERATION OF A CULTURE COLLECTION OF ALGAE (BSR-7920695 A02); 12 MONTHS \$63,500

ELLISON, JOHN R; SUPPORT FOR THE DROSOPHILA SPECIES COLLECTION (DEB-8011010 A01); 12 MONTHS \$50,000

MABRY, TOM J; BIOCHEMICAL SYSTEMATICS OF THE COMPOSITAE (DEB-8102045 A01); 12 MONTHS \$49,822

SIMPSON, BERYL B, AND GALEN, CANDACE; DOCTORAL DISSERTATION RESEARCH IN ECOLOGY (BSR-8117333); 12 MONTHS \$2,100

POWLER, NORMA L; ROLE OF SPATIAL HETEROGENEITY IN POPULATION REGULATION AND COMMUNITY STRUCTURE (DEB-8118963); 24 MONTHS \$50,000

SIMPSON, BERYL B, AND DORR, LAURENCE J; DOCTORAL DISSERTATION RESEARCH IN SYSTEMATIC BIOLOGY (BSR-8119308); 24 MONTHS \$4,338

LEVIN, DONALD A; THE EFFECT OF INBREEDING AND HYBRIDIZATION ON FITNESS IN PHLOX (DEB-8119484); 12 MONTHS \$46,000

SINGER, MICHAEL C, AND OLDFIELD, MARGERY L; DOCTORAL DISSERTATION RESEARCH IN POPULATION BIOLOGY (DEB-8206441); 14 MONTHS \$3,345

RICHARDSON, RICHARD H, AND ELLISON, JOHN R; CRYPTIC SPECIES OF SCREW-WORMS (DEB-8208009); 24 MONTHS \$41,000

UNIVERSITY OF HOUSTON CENTRAL CAMPUS

BRYANT, EDWIN H; THE EFFECTS OF POPULATION BOTTLENECKS UPON GENETIC AND MORPHOMETRIC VARIATION (BSR-8108248 A01*); 12 MONTHS \$45,026

UTAH

BRIGHAM YOUNG UNIVERSITY

RIGBY, J KEITH; SYSTEMATIC STUDIES OF FOUR MAJOR ORDOVICIAN SPONGE FAUNAS FROM NORTH AMERICA AND AUSTRALIA (DEB-8200860*); 36 MONTHS \$53,879

RIGBY, J KEITH; PALEONTOLOGY AN DEPOSITIONAL ENVIRONMENTS OF THE MIDDLE CAMBRIAN MARJUM AND WHEELER FORMATIONS, HOUSE RANGE, UTAH (EAR-8201428*); 24 MONTHS \$35,000

INSTITUTE OF ECOLOGY

LOUCKS, ORIE L; WORKSHOP ON CONTENT AND PRIORITIES FOR APPLIED ECOLOGICAL SCIENCE IN THE 1980'S (DEB-8203830); 6 MONTHS \$15,469

UNIVERSITY OF UTAH

NEGUS, NORMAN C; THE EFFECT OF MBOA ON POPULATION DYNAMICS OF MICROTUS MONTANUS (BSR-7921059 A02); 12 MONTHS \$42,000

DAVIDSON, DIANE W; COLLABORATIVE RESEARCH ON AN EXPERIMENTAL ANALYSIS OF GRANIVORY IN A DESERT ECOSYSTEM (DEB-8021537 A01); 12 MONTHS \$61,389

EHLERINGER, JAMES R; ECOPHYSIOLOGY AND ADAPTATION IN ENCELIA (BSP-8113136 A01); 12 MONTHS \$58,000

CHARNOV, ERIC L; OVIPOSITION BEHAVIOR IN THE PARASITOID NASONIA VITRIPENNIS (DEB-8119206); 24 MONTHS \$72,893

BULL, JAMES J; TEMPERATURE DEPENDENT CONTROL OF SEX RATIO IN NATURAL POPULATIONS (DEB-8200292); 12 MONTHS \$20,220

ENDLER, JOHN A; NATURAL SELECTION ON COLOR PATTERNS IN POECILIA RETICULATA (DEB-8200295); 12 MONTHS \$41,995

UTAH STATE UNIVERSITY

MACMAHON, JAMES A; RECONSTRUCTION OF ECOSYSTEMS IN ARID LANDS (BSR-8101827 A01); 12 MONTHS \$431,021

MACMAHON, JAMES A; THE ROLES OF ANIMALS IN REFORESTATION FOLLOWING A VOLCANIC DISTURBANCE (DEB-8116914); 12 MONTHS \$75,005

SKUJINS, JOHN J; NITROGEN INPUT BY RHIZOSPHERE N₂-FIXATION IN A ROCKY MOUNTAIN ECOSYSTEM (BSR-8206442); 24 MONTHS \$159,343

CALDWELL, MARTYN M, AND RICHARDS, JAMES H; MECHANISMS OF HERBIVORY TOLERANCE AND COMPETITION IN THE SAGEBRUSH/BUNCHGRASS ECOSYSTEM (DEB-8207171); 12 MONTHS \$150,000

VERMONT

UNIVERSITY OF VERMONT

HEINRICH, BERND; INSECT ENERGETICS AND THERMOREGULATION (DEB-8116662); 12 MONTHS \$54,181

KILPATRICK, C WILLIAM; COLLABORATIVE RESEARCH IN CHROMOSOMAL AND BIOCHEMICAL DIFFERENTIATION IN PEROMYSCUS: SYSTEMATICS AND EVOLUTION OF THE P. BOYLII GROUP (BSR-8118966); 36 MONTHS \$70,000

HERBERS, JOAN M; IMPORTANCE OF RELATEDNESS TO INTER- AND INTRA-CASTE (DEB-8203361); 24 MONTHS \$79,997

VIRGINIA

COLLEGE OF WILLIAM AND MARY

SCOTT, JOSEPH L; SYSTEMATICS OF THE RED ALGAE (BSR-7922205 A02); 12 MONTHS \$36,041

COLLEGE OF WILLIAM AND MARY-VIRGINIA INSTITUTE OF MARINE SCIENCE

OLNEY, JOHN E; SYSTEMATICS, EVOLUTIONARY BIOLOGY AND ZOO-GEOGRAPHY OF THE PEARLFISHES (PISCES, OPHIDIIFORMES, CARAPODIDAE) (DEB-8117185); 24 MONTHS \$61,000

GEORGE MASON UNIVERSITY

JOHNSTON, DAVID W; A DESCRIPTIVE ATLAS OF AVIAN UROPHYGAL GLANDS (DEB-8203578); 24 MONTHS \$26,488

HAEFNER, JAMES W; ANALYSIS OF ANIMAL COMMUNITY ORGANIZATION USING GENERATIVE GRAMMARS (DEB-8206573); 24 MONTHS \$50,000

RANDOLPH-MACON COLLEGE

KNISLEY, C B; ECOLOGICAL INFLUENCES ON LARVAL SURVIVORSHIP IN AN ASSEMBLAGE OF PREDACIOUS BEETLES (DEB-8119256); 24 MONTHS \$31,319

UNIVERSITY OF VIRGINIA

WOLFF, JERRY O, AND DUESER, R D; MECHANISMS FOR COEXISTENCE IN SYNTOPIC POPULATIONS (BSR-8105177 A01); 12 MONTHS \$37,788

MILLS, AARON L; EFFECTS OF ACID MINE DRAINAGE ON CARBON AND SULFUR FLOW IN ANAEROBIC LAKE SEDIMENTS (DEB-8206827); 24 MONTHS \$165,100

VIRGINIA POLYTECHNIC INSTITUTE

JOHNSON, JOHN L; RIBOSOMAL RNA HOMOLOGIES AMONG ANAEROBIC BACTERIA (DEB-8001191 A02); 12 MONTHS \$41,304

LINKINS, ARTHUR E; SUBSTRATE DISAPPEARANCE AND ENZYME ACTIVITY IN FOREST LITTER (BSR-8207055); 12 MONTHS \$50,409

WASHINGTON

UNIVERSITY OF WASHINGTON

BRUBAKER, LINDA B; CLIMATE AND FOREST PRODUCTIVITY CHANGES AT THE END OF THE LITTLE ICE AGE (DEB-7921643 A02); 12 MONTHS \$55,553

ZARET, THOMAS M; ECOLOGY AND LIMNOLOGY OF VARZEA LAKES OF THE AMAZON (BSR-8003203 A02*); 12 MONTHS \$150,600

ORIAN, GORDON H; BIO-ECOLOGICAL DETERMINANTS OF BEHAVIOR (BNS-8004873 A01*); 24 MONTHS \$32,000

ORIAN, GORDON H; EVOLUTIONARY INTERACTIONS AMONG PLANTS AND THEIR HERBIVORES (DEB-8005528 A02); 12 MONTHS \$100,001

KENAGY, GEORGE J; ENERGETICS OF MAMMALIAN LIFE HISTORIES (BSR-8005906 A02); 12 MONTHS \$36,700

ROHWER, SIEVERT A; DETERMINANTS OF RELIABILITY IN SIGNALS OF DOMINANCE STATUS (BNS-8008957 A02*); 12 MONTHS \$13,032

ROHWER, SIEVERT A; DETERMINANTS OF RELIABILITY IN SIGNALS OF DOMINANCE STATUS (BNS-8008957 A03*); 12 MONTHS \$12,991

EDMONDSON, W T; LAKE NUTRIENT STUDY (BSR-8009061 A02); 12 MONTHS \$109,766

UGOLINI, FIORENZO C; AN IN VIVO EXPERIMENT TO STUDY THE EFFECT OF AIR-FALL TEPHRA ON SOIL PROCESSES IN A PRISTINE ABIES AMABILIS FOREST (DEB-8022189 A01); 12 MONTHS \$42,642

BLISS, LAWRENCE C, AND DEL MORAL, ROGER; ECOSYSTEM DEVELOPMENT OF NEWLY PERTURBED SITES ON MOUNT ST. HELENS (DEB-8107042 A01); 12 MONTHS \$285,509

BLISS, LAWRENCE C; THE ROLE OF VASCULAR PLANTS AND CRYPTOGAMS IN POLAR SEMI-DESERTS (BSR-8107590 A01); 12 MONTHS \$46,647

RICHEY, JEFFREY E; THE BIOGEOCHEMISTRY OF CARBON IN THE AMAZON RIVER: AN ASSESSMENT (DEB-8107522*); 12 MONTHS \$329,227

GARA, ROBERT I; FIRE - INSECT - DISEASE RELATIONSHIPS OF A LODGEPOLE PINE ECOSYSTEM (DEB-8109813 A01); 12 MONTHS \$56,000

GRIER, CHARLES C; EFFECTS OF MT. ST. HELENS TEPHRA ON BELOW-GROUND BIOLOGICAL PROCESSES IN ABIES AMABILIS ZONE FORESTS IN WASHINGTON (BSR-8111064 A01); 12 MONTHS \$87,500

KOHN, ALAN J; ADAPTIVE DIFFERENTIATION, BIOLOGICAL RELATIONSHIPS, AND SYSTEMATICS OF CONIDAE (DEB-8117945); 12 MONTHS \$65,000

HASKINS, EDWARD F; LIFE-HISTORY STUDIES OF SELECTED SPECIES OF MYXOMYCETES (DEB-8117991); 12 MONTHS \$38,404

AMMIRATI, JOE F; STUDIES IN THE AGARIC GENUS CORTINARIUS (DEB-8118972); 36 MONTHS \$92,104

SLATKIN, M W; GENETICAL STRUCTURE OF SUBDIVIDED POPULATIONS (DEB-8120580); 12 MONTHS \$43,063

DEL MORAL, ROGER; CONTROL OF DIVERSITY IN SUBALPINE PLANT COMMUNITIES (DEB-8120629); 24 MONTHS \$55,000

DENTON, MELINDA F; FACILITIES SUPPORT FOR THE UNIVERSITY OF WASHINGTON HERBARIUM (DEB-8200115); 36 MONTHS \$176,538

WISSMAR, ROBERT C; NITROUS OXIDE AND NITRIFICATION IN NEAR-SHORE SURFACE SEDIMENTS OF OLIGOTROPHIC LAKES (BSR-8206859); 12 MONTHS \$49,999

WASHINGTON STATE UNIVERSITY

THOMPSON, JOHN N; MODES OF HERBIVORY AND PATCH DYNAMICS IN COEVOLVING INSECTS AND PLANTS (DEB-7918492 A03); 12 MONTHS \$41,437

MACK, RICHARD N; PLANT POPULATION BIOLOGY WITHIN STEPPE COMMUNITIES OF EASTERN WASHINGTON - ROLE OF ALIEN BROMES (BSR-8001518 A02); 12 MONTHS \$35,000

MACK, RICHARD N, AND BLACK, R A; PERTURBATION AND COMMUNITY RESPONSE: EFFECTS OF THE MOUNT ST. HELENS' ASHFALL ON

XEROPHYTIC VEGETATION IN EASTERN WASHINGTON (DEB-802134 A01); 24 MONTHS \$102,768
 KING, JAMES R. AND MURPHY, MARY E; DOCTORAL DISSERTATION RESEARCH IN POPULATION BIOLOGY (DEB-8116306); 24 MONTHS \$5,040
 KING, JAMES R; GROUP TRAVEL FOR U. S. PARTICIPATION IN THE 18TH INTERNATIONAL ORNITHOLOGICAL CONGRESS, MOSCOW, USSR, AUGUST 16-25, 1982 (DEB-8117432); 6 MONTHS \$18,700
 ROGERS, JACK D; BIOLOGICAL, CYTOLOGICAL, AND SYSTEMATIC STUDIES OF XYLARIA (DEB-8117897); 24 MONTHS \$43,082
 KING, JAMES R; AVIAN NUTRITIONAL ECOLOGY (DEB-8307511); 12 MONTHS \$53,000
 THOMPSON, JOHN N, AND PIPER, JON K; DOCTORAL DISSERTATION RESEARCH IN POPULATION BIOLOGY (DEB-8210655); 12 MONTHS \$1,238

WEST VIRGINIA

WEST VIRGINIA UNIVERSITY

DECOSTA, JOHN, AND HAVENS, KARL E; DOCTORAL DISSERTATION RESEARCH IN ECOLOGY (DEB-8211706); 24 MONTHS \$2,000

WISCONSIN

UNIVERSITY OF WISCONSIN-MADISON

FITCH, WALTER M, AND FITCH, WALTER M; MOLECULAR APPROACHES TO THE STUDY OF EVOLUTION (BSR-7814197 A04); 12 MONTHS \$48,800
 MAGNUSON, JOHN J; HABITAT, FISH COMMUNITY, AND RESOURCE UTILIZATION IN SMALL NORTHERN LAKES (BSR-7912337 A03); 12 MONTHS \$62,431
 SCRIBER, J M; FOODPLANT UTILIZATION BY LEPIDOPTERA (BSR-791745 A02); 12 MONTHS \$56,000
 ABER, JOHN D; ORGANIC MATTER AND NITROGEN DYNAMICS IN FOREST ECOSYSTEMS (DEB-8005081 A03); 12 MONTHS \$60,122
 ILTIS, HUGH H; MORPHOLOGIC-SYSTEMATIC STUDIES IN THE FEMALE INFLORESCENCE OF CORN (ZEA MAYS) (BSR-8022772 A01); 12 MONTHS \$35,367
 ATCHLEY, WILLIAM R; QUANTITATIVE GENETIC ASPECTS OF GROWTH AND FORM (DEB-8109904 A01); 12 MONTHS \$66,891
 ANDREWS, JOHN H; ISLAND BIOGEOGRAPHY AND THE MICROBIAL ECOLOGY OF LEAF SURFACES (DEB-8110159 A01); 12 MONTHS \$41,667
 DODSON, STANLEY I; PREDATOR-INDUCED POLYMORPHISMS IN CLADOCERA (DEB-8121043); 24 MONTHS \$60,000
 THOMSON, JOHN W; AMERICAN ARCTIC LICHENS II. MICROLICHENS (DEB-8208201); 36 MONTHS \$44,150

WYOMING

UNIVERSITY OF WYOMING

KNIGHT, DENNIS H; WATER AND NUTRIENT LOSS FROM ROCKY MOUNTAIN FOREST ECOSYSTEMS (DEB-8011024 A02); 12 MONTHS \$78,131
 KNIGHT, DENNIS H; WATER AND NUTRIENT FLUXES IN LODGEPOLE PINE FORESTS IN WYOMING (DEB-8113546); 24 MONTHS \$100,196
 SMITH, WILLIAM K; PHYSIOLOGICAL ADAPTATION AND REPRODUCTIVE EFFORT IN SUBALPINE UNDERSTORY PLANTS (DEB-8300742); 12 MONTHS \$36,500
 LILLEGRAVEN, JASON A; LATE CRETACEOUS AND EARLY PALEOCENE MAMMALIAN FAUNAS, CENTRAL AND NORTH-CENTRAL WYOMING (EAR-8305211); 12 MONTHS \$29,800

SOCIAL AND ECONOMIC SCIENCES

ARIZONA

ARIZONA STATE UNIVERSITY

RASLER, KAREN A; COLLABORATIVE RESEARCH ON WAR AND STATE-BUILDING (SES-8306063); 19 MONTHS \$33,676
 WALKER, STEPHEN G; COLLABORATIVE RESEARCH ON MAPPING THE IMPACT OF PERSONALITY TRAITS UPON FOREIGN POLICY DECISIONS (SES-8306637); 12 MONTHS \$35,126

UNIVERSITY OF ARIZONA

BERK-SELIGSON, SUSAN; THE IMPACT OF BILINGUALISM ON JUDICIAL PROCESS (SES-8114617); 12 MONTHS \$39,770
 GODWIN, R KENNETH; MEMBERSHIP IN PUBLIC INTEREST GROUPS: RATIONAL CHOICE MODELS AND INTEREST GROUP POLICY (SES-8117079); 12 MONTHS \$24,880
 LENOIR, TIMOTHY; COLLABORATIVE RESEARCH ON THE EMERGENCE OF EXPERIMENTAL PHYSIOLOGY: A CASE STUDY IN THE TECHNOLOGY OF MEASUREMENT, TECHNIQUE, AND CONCEPT FORMATION IN SCIENCE (SES-8304963); 24 MONTHS \$25,000
 SMITH, VERNON L; EXPERIMENTAL STUDIES OF RESOURCE ALLOCATION MECHANISMS (SES-8305983); 12 MONTHS \$69,272
 CHEW, SOO; VALIDATION OF AN AXIOMATIC GENERALIZATION OF EXPECTED UTILITY THEORY (SES-8313602); 24 MONTHS \$35,278

CALIFORNIA

CALIFORNIA INSTITUTE OF TECHNOLOGY

CAIN, BRUCE E, AND MCCUE, KENNETH; DOCTORAL DISSERTATION RESEARCH IN POLITICAL SCIENCE (SES-8114447); 12 MONTHS \$6,060
 WILDE, LOUIS L, AND SCHWARTZ, ALAN; INTERVENING IN MARKETS ON THE BASIS OF IMPERFECT INFORMATION: AN INFORMATION THEORETIC APPROACH (SES-8117708); 18 MONTHS \$49,980
 MCKELVEY, RICHARD D; COLLABORATIVE RESEARCH ON INFORMATION IN ELECTIONS: THEORETICAL AND EXPERIMENTAL ANALYSIS (SES-8306184); 12 MONTHS \$51,590

CALIFORNIA STATE UNIVERSITY, FULLERTON

WEBER, BRUCE H; HISTORICAL ANALYSIS OF THE DEVELOPMENT AND EVALUATION OF CHEMIOSMOTIC CONCEPTS IN BIOENERGETICS (SES-8304326); 12 MONTHS \$25,000

CENTER FOR ADV STUDY IN THE BEHAVIORAL SCIENCE

LINDZEY, GARDNER, AND LINDEE, ROBERT G; SUPPORT FOR INTERDISCIPLINARY RESEARCH AT THE CENTER FOR ADVANCED STUDY IN THE BEHAVIORAL SCIENCES (04S-8011484); 12 MONTHS \$100,000
 LINDZEY, GARDNER, AND LINDEE, ROBERT G; SUPPORT FOR INTERDISCIPLINARY RESEARCH AT THE CENTER FOR ADVANCED STUDY IN THE BEHAVIORAL SCIENCES (04S-8011484 A01); \$150,000

HARVEY MUDD COLLEGE

OLSON, RICHARD G; THE ROLE OF RELIGION IN THE RISE OF MODERN SCIENCE (SES-8304083); 12 MONTHS \$5,556

INSTITUTE FOR POLICY AND MANAGEMENT RESEARCH

BLAKE, JUDITH; NUMBER OF SIBLINGS AND ACHIEVEMENT CHARACTERISTICS AND GOALS OF HIGH SCHOOL SENIORS (SES-8308114); 12 MONTHS \$35,330

MILLS COLLEGE

SCHULMAN, PAUL R. AND BASSEIN, RICHARD; COMPUTER-ASSISTED MODELLING OF THE GROWTH AND DECLINE OF PUBLIC AGENCIES AND PROGRAMS (SES-8309078); 17 MONTHS \$38,537

PERCEPTRONICS INC

SLOVIC, PAUL, AND MACREGOR, DON; PERCEIVED ACCEPTABILITY OF DECISION-MAKING METHODS (SES-8213481); 12 MONTHS \$68,830

RAND CORPORATION

SMITH, JAMES P, AND LILLARD, LEE A; STABILITY OF FAMILY INCOME INEQUALITY (SES-8023256 A01); 12 MONTHS \$70,423

STANFORD UNIVERSITY

MANNE, ALAN S, AND EAVES, B CURTIS; COMPUTATION OF EQUILIBRIA FOR PIECEWISE LINEAR SYSTEMS (SES-7816811 A03); 12 MONTHS \$20,000

AMEMIYA, TAKESHI; PROPERTIES OF ESTIMATORS OF THREE WIDELY USED ECONOMETRIC MODELS (SES-7912965 A02); 12 MONTHS \$36,672

ANDERSON, THEODORE W; SIMULTANEOUS EQUATION MODELS - ESTIMATION, CONTROL AND PREDICTION (SES-7913976 A02); 12 MONTHS \$35,976

KREPS, DAVID; ECONOMIES WITH A SEQUENCE OF MARKETS (SES-8006407 A01); 24 MONTHS \$52,119

EULAU, HEINZ; NETWORK ANALYSIS OF REPRESENTATION (SES-8017766 A01); \$9,995

KURZ, MORDECAI; WORKSHOP ON SOCIAL ASSOCIATION UNDER VARYING MARKET STRUCTURES-STANFORD UNIV-JUNE THROUGH AUGUST 1982 (SES-8104769); 12 MONTHS \$17,231

KURZ, MORDECAI; WORKSHOPS ON SOCIAL ALLOCATIONS UNDER VARYING MARKET STRUCTURES - I (SES-8104769 A01); 24 MONTHS \$99,998

BRESNAHAN, TIMOTHY F; AN EMPIRICAL APPROACH TO AUTO-MOBILE INDUSTRY ISSUES (SES-8111491); 24 MONTHS \$59,215

FAGEN, RICHARD R; THE POLITICAL ECONOMY OF INCLUSIONARY REGIMES (SES-8120619); 24 MONTHS \$139,057

HAMMOND, PETER; WELFARE ECONOMICS AS CONSISTENT DYNAMIC CHOICE UNDER UNCERTAINTY (SES-8300987); 12 MONTHS \$20,710

ARROW, KENNETH J; INTRAFIRM AND INTERFIRM INFORMATION FLOWS AND THEIR EFFECTS ON FIRM SIZE, INNOVATION, AND PRICE FLEXIBILITY (SES-8301378); 24 MONTHS \$69,961

KURZ, MORDECAI; STRATEGIC FACTORS IN ALLOCATION AND MARKET STRUCTURES (SES-8301373); 24 MONTHS \$69,942

ARROW, KENNETH J; THREE ISSUES IN THE MICROECONOMICS OF INFLATION (SES-8309478); 24 MONTHS \$46,253

UNIVERSITY OF CALIFORNIA, BERKELEY

DEBREU, GERARD; MATHEMATICS OF EFFICIENT RESOURCE ALLOCATION (SES-7912380 A02); 12 MONTHS \$63,179

COLLIER, DAVID; LABOR, PARTY AND REGIME IN LATIN AMERICA (SES-8017788 A01); 6 MONTHS \$14,912

LESCH, JOHN E; THE SULFA DRUGS: A STUDY IN THE RELATIONS OF SCIENCE, MEDICINE, AND INDUSTRY IN THE 20TH CENTURY (SES-8111985); 12 MONTHS \$5,745

ROTHENBERG, THOMAS J; EVALUATING ECONOMETRIC PROCEDURES (SES-8111806); 12 MONTHS \$16,000

GALE, DAVID; OPTIMAL RESOURCE ALLOCATION IN DYNAMIC ECONOMIC MODELS (SES-8113548); 12 MONTHS \$16,000

AKERLOF, GEORGE A; COGNITIVE DISSONANCE AND GROUP NORMS IN ECONOMICS (SES-8119150); 24 MONTHS \$47,558

GILBERT, RICHARD J, AND FUDENBERG, DREW; STRATEGIC COMPETITION AND ECONOMIC PERFORMANCE (SES-8307985); 24 MONTHS \$66,436

MARKUSEN, ANN, AND HALL, PETER; INNOVATION AND REGIONAL GROWTH (SES-8308104); 12 MONTHS \$40,014

SIMON, LEO K; BERTRAND FOUNDATIONS OF THE THEORY OF PERFECT COMPETITION (SES-8308501); 24 MONTHS \$31,957

BURAWOY, MICHAEL, AND WEITZER, RONALD; DOCTORAL DISSERTATION RESEARCH IN LAW & SOCIAL SCIENCES (SES-8309033); 24 MONTHS \$4,967

UNIVERSITY OF CALIFORNIA, DAVIS

LINDERT, PETER H; INEQUALITY DURING BRITISH INDUSTRIALIZATION (SES-7909361 A01); 12 MONTHS \$24,925

UNIVERSITY OF CALIFORNIA, IRVINE

OWEN, GUILLERMO, AND GROFMAN, BENJAMIN N.; CONFERENCE ON INFORMATION POOLING AND OPTIMIZING GROUP JUDGMENTAL ACCURACY, DECEMBER 1982, IRVINE, CALIFORNIA (SES-8909109); 12 MONTHS \$28,309

DESBARATS, J. M.; SECONDARY MIGRATION OF INDOCHINESE REFUGEES (SES-8918961); 9 MONTHS \$11,132

UNIVERSITY OF CALIFORNIA, LOS ANGELES

BONACICH, PHILLIP, AND GRUSKY, OSCAR; THE ROLE OF CHILDREN IN FAMILY COALITION FORMATION (SES-780731 A03); 12 MONTHS \$5,182

RILEY, JOHN G.; MARKET INSTITUTIONS WITH INFORMATIONAL ASYMMETRY (SES-8105891 A01); \$14,326

ZETTLIN, MAURICE, AND REGENSBURGER, WILLIAM; DOCTORAL DISSERTATION RESEARCH IN SOCIOLOGY (SES-8123084); 12 MONTHS \$4,572

GEOFFRUON, ARTHUR M.; RESEARCH ON AGGREGATION AND MODELING (SES-8900991*); 12 MONTHS \$29,610

SCOTT, ALLEN J.; PATTERNS OF INDUSTRIAL LOCATION IN THE MODERN METROPOLIS: A CASE STUDY OF LOS ANGELES (SES-8904379); 14 MONTHS \$43,394

LEAMER, EDWARD E.; LIMITS FOR INFERENCES FROM NON-EXPERIMENTAL DATA (SES-8907532); 24 MONTHS \$65,010

ELLICKSON, BRYAN; INDIVISIBILITY, HOUSING MARKETS AND HEDONIC THEORY (SES-8907997); 24 MONTHS \$54,000

WISE, M. N.; COLLABORATIVE RESEARCH ON THE EMERGENCE OF EXPERIMENTAL PHYSIOLOGY: A CASE STUDY IN THE TECHNOLOGY OF MEASUREMENT, TECHNIQUE, AND CONCEPT FORMATION IN SCIENCE (SES-8915096); 24 MONTHS \$6,000

UNIVERSITY OF CALIFORNIA, RIVERSIDE

SMITH, ELIOT R.; COLLABORATIVE RESEARCH ON AMERICAS' BELIEFS ABOUT SOCIAL STRATIFICATION (SES-8121063); 6 MONTHS \$11,840

LOVELL, CATHERINE H.; MONITORING THE EFFECTS OF CHANGES IN FEDERAL MANDATES ON STATE AND LOCAL GOVERNMENT (SES-8905159); 24 MONTHS \$97,017

UNIVERSITY OF CALIFORNIA, SAN DIEGO

CRAWFORD, VINCENT, AND SOBEL, JOEL; STRATEGIC COMMUNICATION AND BARGAINING (SES-8904038); 24 MONTHS \$55,803

BECK, NATHANIEL; POLITICAL INFLUENCES ON DOMESTIC MONETARY POLICY: A COMPARATIVE STUDY (SES-8907431); 24 MONTHS \$48,043

UNIVERSITY OF CALIFORNIA, SANTA BARBARA

BIELBY, WILLIAM T., AND BARON, JAMES N.; JOBS, FIRMS AND INDUSTRIES: ECONOMIC DUALISM AND THE ORGANIZATION OF WORK (SES-7924905 A08*); 12 MONTHS \$45,917

SHRADER-FRECHET, KRISTIN; FOUR METHODOLOGICAL ASSUMPTIONS IN RISK-COST-BENEFIT ANALYSIS (SES-8905112); 12 MONTHS \$12,235

COLLEDGE, REGINALD G., AND HUBERT, LAWRENCE J.; COMBINATORIAL DATA ANALYSIS PROCEDURES FOR THE EVALUATION OF ALTERNATE MODELS IN GEOGRAPHY (SES-8906067); 12 MONTHS \$30,401

SMITH, TERENCE R., PELLEGRINO, JAMES R., AND COLLEDGE, REGINALD G.; A COMPUTATIONAL PROCESS APPROACH TO CHILDREN'S ACQUISITION OF SPATIAL KNOWLEDGE OF A LARGE-SCALE ENVIRONMENT (SES-8909491*); 18 MONTHS \$30,000

SHAPIRO, PERRY, BERGSTROM, THEODORE C., AND RUBINFELD, DANIEL L.; THE DEMAND FOR LOCAL PUBLIC GOODS (SES-8909732); 24 MONTHS \$96,173

WITTMAN, DONALD A.; ECONOMETRIC STUDIES OF CIVIL TRIALS AND ARBITRATION DECISIONS (SES-8907347); 24 MONTHS \$40,414

UNIVERSITY OF SOUTHERN CALIFORNIA

MAGILL, MICHAEL J.; ANALYSIS OF FUTURES MARKETS (SES-8900432); 12 MONTHS \$31,888

SPITZER, MATTHEW; EXPERIMENTS ON BARGAINING AND LIABILITY RIGHTS (SES-8901845); 12 MONTHS \$40,000

FIELD, HARTLEY H.; NOMINALISM, METALOGIC, AND SEMANTICS (SES-8905264); 12 MONTHS \$6,000

SPULBER, DANIEL F.; COMPETITION AND WELFARE WITH NONLINEAR PRICING (SES-8909219); 12 MONTHS \$8,265

WINTERFELDT, DETLOF V., AND WARD, EDWARDS M.; ON THE RELEVANCE OF THE UTILITY-VALUE DISTINCTION FOR DECISION ANALYSIS (SES-8913430); 12 MONTHS \$50,115

UNIVERSITY OF CALIFORNIA, SANTA CRUZ

WITTMAN, DONALD A.; ECONOMETRIC STUDIES OF CIVIL TRIALS AND ARBITRATION DECISIONS (SES-8907347); 24 MONTHS \$40,414

UNIVERSITY OF SOUTHERN CALIFORNIA

MAGILL, MICHAEL J.; ANALYSIS OF FUTURES MARKETS (SES-8900432); 12 MONTHS \$31,888

SPITZER, MATTHEW; EXPERIMENTS ON BARGAINING AND LIABILITY RIGHTS (SES-8901845); 12 MONTHS \$40,000

FIELD, HARTLEY H.; NOMINALISM, METALOGIC, AND SEMANTICS (SES-8905264); 12 MONTHS \$6,000

SPULBER, DANIEL F.; COMPETITION AND WELFARE WITH NONLINEAR PRICING (SES-8909219); 12 MONTHS \$8,265

WINTERFELDT, DETLOF V., AND WARD, EDWARDS M.; ON THE RELEVANCE OF THE UTILITY-VALUE DISTINCTION FOR DECISION ANALYSIS (SES-8913430); 12 MONTHS \$50,115

UNIVERSITY OF DENVER

STERLING, JOYCE S., AND MOORE, WILBERT E.; LONGITUDINAL AND COMPARATIVE STUDY OF THE RATIONALIZATION OF LAW (SES-8121850); 18 MONTHS \$25,000

COLORADO

COLORADO SCHOOL OF MINES

OCHS, K. H.; THE FAILED REVOLUTION IN APPLIED SCIENCE: STUDIES OF INDUSTRY BY MEMBERS OF THE ROYAL SOCIETY AND THE ORIGINS OF THE MODERN SCIENCE/TECHNOLOGY RELATIONSHIP (SES-8905471); 6 MONTHS \$2,434

UNIVERSITY OF COLORADO AT BOULDER

FRANKLIN, ALLAN D.; THE ROLE OF EXPERIMENT IN PHYSICS (SES-8904074); 12 MONTHS \$6,000

PALM, RISA; THE MINORITY REAL ESTATE AGENCY: IMPLICATIONS FOR THE AVAILABILITY OF SPATIAL INFORMATION IN THE RESIDENTIAL MOBILITY PROCESS (SES-8910973); 14 MONTHS \$27,210

UNIVERSITY OF DENVER

STERLING, JOYCE S., AND MOORE, WILBERT E.; LONGITUDINAL AND COMPARATIVE STUDY OF THE RATIONALIZATION OF LAW (SES-8121850); 18 MONTHS \$25,000

CONNECTICUT

YALE UNIVERSITY

SCARF, HERBERT E.; INDIVISIBILITIES IN PRODUCTION (SES-7927127 A02); 12 MONTHS \$108,950

BOORMAN, SCOTT A.; MATHEMATICAL MODELS OF SOCIAL NETWORKS: MATCHING, EFFICIENCY, AND STRUCTURE (SES-8904815 A02); 12 MONTHS \$62,859

WEISS, LAURENCE, AND ROSS, STEPHEN A.; THE ECONOMICS OF UNCERTAINTY AND BUSINESS CYCLE THEORY (SES-8906587 A01); 12 MONTHS \$81,874

IYENGAR, SHANTO; COLLABORATIVE RESEARCH ON EXPERIMENTAL STUDIES OF MEDIA AGENDA-SETTING (SES-8908714); 18 MONTHS \$37,855

GEANAKOPOLOS, JOHN; WALRASIAN EQUILIBRIA, INDETERMINACY, SUBOPTIMALITY, AND NEO-KEYNESIAN MACROECONOMICS (SES-8910034); 24 MONTHS \$60,203

HOLMES, FREDERIC L.; COLLABORATIVE RESEARCH ON THE EMERGENCE OF EXPERIMENTAL PHYSIOLOGY: A CASE STUDY IN THE TECHNOLOGY OF MEASUREMENT, TECHNIQUE, AND CONCEPT FORMATION IN SCIENCE (SES-8914833); 24 MONTHS \$6,000

DELAWARE

UNIVERSITY OF DELAWARE

WILLIAMS, MARY B.; ANALYSIS OF THE STRUCTURE OF EVOLUTIONARY THEORY (SES-8906141); 12 MONTHS \$25,000

DISTRICT OF COLUMBIA

AMERICAN INSTITUTE OF ARCHITECTS (AIA)

HARRIS, CHARLES M.; MICROFORM SUPPLEMENT OF PATENT OFFICE PAPERS OF DR. WILLIAM THORNTON (SES-8905298); 12 MONTHS \$5,990

AMERICAN POLITICAL SCIENCE ASSOCIATION

MANN, THOMAS E.; INTERNATIONAL TRAVEL GRANTS TO IPSA XII WORLD CONGRESS, AUGUST 8-14, 1982, RIO DE JANEIRO, BRAZIL (SES-8905588); 9 MONTHS \$22,000

AMERICAN SOCIOLOGICAL ASSOCIATION

DYNES, RUSSELL R.; GROUP TRAVEL FOR U.S. PARTICIPANTS IN THE TENTH WORLD CONGRESS OF SOCIOLOGY, MEXICO CITY, MEXICO - AUGUST 16-21, 1983 (SES-8118637); 9 MONTHS \$10,000

AMERICAN STATISTICAL ASSOCIATION

LEONE, FRED C.; RESEARCH TO IMPROVE THE GOVERNMENT-GENERATED SOCIAL SCIENCE DATA BASE (SES-8122061); 24 MONTHS \$433,638

ANTIOCH UNIVERSITY-ANTIOCH SCHOOL OF LAW

MUNGER, FRANK W.; ECONOMIC TRENDS, SOCIAL DEVELOPMENT, AND PATTERNS OF CIVIL LITIGATION (SES-8121228); 24 MONTHS \$72,092

ASSOCIATION OF AMERICAN GEOGRAPHERS

PETRIE, WILLIAM L.; TRAVEL SUPPORT FOR THE INTERNATIONAL GEOGRAPHICAL UNION LATIN AMERICAN REGIONAL CONFERENCE, RIO DE JANEIRO, BRAZIL; AUGUST 16-21, 1983 (SES-8900431); 6 MONTHS \$5,400

BROOKINGS INSTITUTION

CRANDALL, ROBERT W., KEELER, THEODORE E., AND LAVE, LESTER B.; THE CONFLICTING GOALS OF REGULATIONS AFFECTING THE AUTOMOBILE IN INTEGRATED ECONOMIC ANALYSIS (SES-8108931 A01); 12 MONTHS \$6,501

CATHOLIC UNIVERSITY OF AMERICA

WALLACE, WILLIAM A.; FOUNDATIONS OF MODERN SCIENCE (SES-7924885 A03); 12 MONTHS \$6,000

PEARCE, DIANE M.; ANALYSIS OF HOUSING MARKET PRACTICES IN FORTY CITIES (SES-8909999); 12 MONTHS \$66,713

EXECUTIVE OFFICE OF THE PRESIDENT-OFFICE OF MANAGEMENT AND BUDGET

DUNCAN, JOSEPH W.; INTERAGENCY CONSORTIUM ON NATIONAL STATISTICS (SES-8121616 A01); \$15,000

EVINGER, SUZANN K.; INTERAGENCY CONSORTIUM ON NATIONAL STATISTICS (SES-8121616 A01); \$15,000

NATIONAL ACADEMY OF SCIENCES

GOSLIN, DAVID A.; COMMITTEE ON RESEARCH IN THE BEHAVIORAL AND SOCIAL SCIENCES (SES-7924467 A01*); \$82,499

GOSLIN, DAVID A.; STATISTICAL ASSESSMENTS AS EVIDENCE IN THE COURTS (SES-8913434); 12 MONTHS \$75,000

GOLDFIELD, EDWIN D.; COGNITIVE ASPECT OF SURVEY QUESTIONNAIRE DESIGN (SES-8913706*); 12 MONTHS \$114,013

FLORIDA

FLORIDA STATE UNIVERSITY

THOMPSON, WILLIAM R.; COLLABORATIVE RESEARCH ON WAR AND STATE-BUILDING (SES-8906062); 18 MONTHS \$40,785

UNIVERSITY OF FLORIDA

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VILLEMEZ, WAYNE J. AND BRIDGES, WILLIAM P. JOBS AND WORKERS IN A METROPOLITAN LABOR MARKET (SES-8012117 A01); 12 MONTHS \$74,737

SCHWARTZ, MILDRED A. INTEGRATION AND AMBIGUITY IN STATE POLITICAL PARTY ORGANIZATIONS (SES-8013455 A01); \$5,930

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GALASKIEWICZ, JOSEPH; *RESOURCE ALLOCATION AND DONATIVE TRANSFERS* (SES-8008570 A01); 12 MONTHS \$39,843

SIMS, CHRISTOPH A.; *ECONOMETRIC EVALUATION OF MACROECONOMIC POLICY* (SES-8112026); 12 MONTHS \$37,263

JORDAN, JAMES S.; *ALLOCATION AND PREDICTION IN STOCHASTIC ENVIRONMENTS* (SES-8112029); 24 MONTHS \$40,055

PRESCOTT, EDWARD C.; *BUSINESS CYCLE AND THE STRUCTURE OF INDUSTRY* (SES-8118735); 12 MONTHS \$29,020

HURWICZ, LEONID; *COMPARISON AND ANALYSIS OF SYSTEMS AND TECHNIQUES OF ECONOMIC ORGANIZATIONS* (SES-8208378*); 12 MONTHS \$19,191

UNIVERSITY OF MINNESOTA AT SAINT PAUL

KOTTLER, MALCOLM J.; *THE ROLE OF MIMICRY IN CONTROVERSIES OVER THE THEORY OF NATURAL SELECTION: THE CONTRIBUTION OF EDWARD B. POULTON* (SES-8204477); 12 MONTHS \$25,000

MISSOURI

UNIVERSITY OF MISSOURI, COLUMBIA

LANKFORD, JOHN; *GROWTH AND DEVELOPMENT OF A SCIENTIFIC SPECIALTY: ASTROPHYSICS AND THE TRANSFORMATION OF THE AMERICAN ASTRONOMICAL COMMUNITY, 1859-1936* (SES-8304498*); 12 MONTHS \$25,000

UNIVERSITY OF MISSOURI, KANSAS CITY

FRANKEL, HENRY; *THE RISE OF THE PALEOMAGNETIC DIRECTIONAL STUDIES AND THEIR IMPORTANCE IN THE RECENT REVOLUTION IN THE EARTH SCIENCES* (SES-8304492); 12 MONTHS \$6,000

WASHINGTON UNIVERSITY

AMES, BARRY; *A CROSS-NATIONAL ANALYSIS OF GOVERNMENTAL EXPENDITURES IN THREE HISTORICAL PERIODS* (SES-8309454); 15 MONTHS \$71,590

MCCLENNEN, EDWARD F.; *1984 SUMMER INSTITUTE ON PUBLIC CHOICE THEORY* (SES-8210730*); 36 MONTHS \$124,607

NEW JERSEY

PRINCETON UNIVERSITY

SONNENSCHN, HUGO F.; *COLLABORATIVE RESEARCH ON FOUNDATIONS OF COMPETITIVE ANALYSIS* (SES-7924830 A02); 12 MONTHS \$41,069

SMALL, KENNETH A.; *DISCRETE CHOICE ECONOMETRICS: ESTIMATION OF TWO PROBABILITY MODELS* (SES-8007010 A01); 12 MONTHS \$33,402

CHOW, GREGORY C.; *CONTROL, ESTIMATION AND SELECTION OF ECONOMETRIC MODELS* (SES-8012582 A01); 12 MONTHS \$58,980

QUANDT, RICHARD E. AND GOLDFELD, STEPHEN M.; *THE ECONOMETRICS OF DISEQUILIBRIUM AND QUANTITY RATIONING* (SES-8012592 A02); 12 MONTHS \$75,300

VAN FRAASSEN, BAS C.; *AN EPISTEMOLOGY OF SCIENCE COMPATIBLE WITH EMPIRICISM* (SES-8204111); 18 MONTHS \$25,000

MARK, ROBERT; *TECHNICAL STUDY OF ANCIENT ROMAN ARCHITECTURE* (SES-8205841*); 18 MONTHS \$10,000

JEFFREY, RICHARD C.; *PROBABILISTIC EPISTEMOLOGY* (SES-8206024); 12 MONTHS \$6,000

SHAPIRO, CARL; *SIGNALS OF PRODUCT QUALITY* (SES-8207377*); 24 MONTHS \$12,833

ANDERSON, ROBERT M.; *MATHEMATICAL ECONOMICS, PROGRAMMING AND COMBINATORIAL PROBLEMS* (SES-8207606); 12 MONTHS \$17,810

KATZ, MICHAEL L.; *SCREENING AND IMPERFECT COMPETITION AMONG MULTIPRODUCT FIRMS* (SES-8209412); 12 MONTHS \$11,177

RUTGERS UNIVERSITY-BUSCH CAMPUS

MC CARTY, L. THORNE AND SRIDHARAN, NATASA S.; *A COMPUTATIONAL THEORY OF LEGAL ARGUMENT (COMPUTER RESEARCH)* (MCS-8203591*); 12 MONTHS \$5,000

RUTGERS UNIVERSITY-NEWARK CAMPUS

TROY, LEO AND SHEFLIN, NEIL; *THE FINANCES AND FINANCIAL MANAGEMENT OF AMERICAN UNIONS IN THE SERVICE ECONOMY* (SES-7914083 A02); 18 MONTHS \$50,000

RUTGERS UNIVERSITY

ZABLOCKI, BENJAMIN D. AND AIDALA, ANGELA A.; *THE ENDURING EFFECTS OF COLLECTIVE INFLUENCE* (SES-8208581); 12 MONTHS \$57,333

JENKINS, REESE V.; *THOMAS A. EDISON PAPERS* (SES-8213220); 12 MONTHS \$55,589

WILLIAM PATERSON COLLEGE

GRUBER, CAROL S.; *SCIENCE, GOVERNMENT AND UNIVERSITIES IN WORLD WAR II* (SES-8205846); 12 MONTHS \$6,000

NEW MEXICO

INDIVIDUAL AWARD

DONAHUE, W. H.; *THE NEW ASTRONOMY* (SES-8119140); 12 MONTHS \$5,700

UNIVERSITY OF NEW MEXICO

SUTTON-BARBBERE, GALE, TEITELBAUM, LEE E. AND JOHNSON, PEDER J.; *MODELING JURY DELIBERATION AND THE EFFECTS OF LEGAL RULES* (SES-8011686 A01); 12 MONTHS \$33,970

NEW YORK

AMERICAN COUNCIL OF LEARNED SOCIETIES

BURKHARDT, FREDERICK; *EDITION OF THE CORRESPONDENCE OF CHARLES DARWIN* (SES-7912422 A02); 12 MONTHS \$47,000

AMERICAN INSTITUTE OF PHYSICS

WEART, SPENCER R. AND HODDESON, LILLIAN H.; *A HISTORY OF SOLID-STATE PHYSICS* (SES-8242082); 12 MONTHS \$25,000

BARNARD COLLEGE

DEVONS, SAMUEL; *SOME HISTORICAL ASPECTS OF EXPERIMENTAL PHYSICS* (SES-8205436); 12 MONTHS \$6,000

BARUCH COLLEGE

JACOB, MARGARET C.; *THE SOCIAL RELATIONS OF SCIENCE AND ITS EFFECTS ON INDUSTRIALIZATION* (SES-8204750); 24 MONTHS \$25,000

COLLEGE AT BROCKPORT

DEYO, FREDERIC C.; *EXPORT-ORIENTED INDUSTRIALIZATION AND LABOR RELATIONS* (SES-8207510); 12 MONTHS \$24,667

COLLEGE AT NEW PALTZ

MABEE, CARLETON; *AN HISTORICAL STUDY OF MARGARET MEAD (1901-1978) AS A SCIENTIST IN PUBLIC AFFAIRS* (SES-8204307); 12 MONTHS \$4,802

COLLEGE AT OLD WESTBURY

ROSENTHAL, NAOMI; *SOCIAL NETWORKS AND SOCIAL MOVEMENTS: A DYNAMIC ANALYSIS* (SES-8108222 A01); 6 MONTHS \$5,800

COLUMBIA UNIVERSITY

MERTON, ROBERT K.; *THEORETICAL SOCIOLOGY: UNINTENDED CONSEQUENCES AND THE SELF-FULFILLING PROPHECY* (SES-7927238 A02); 12 MONTHS \$44,980

ZUCKERMAN, HARRIET AND COLE, JONATHAN R.; *CAREER PATTERNS IN SCIENTIFIC RESEARCH PERFORMANCE* (SES-8008602 A02); 12 MONTHS \$73,877

BHAGWATI, JAGDISH N; *INTERNATIONAL TRADE, FACTOR MOBILITY AND WELFARE* (SES-8085401 A01); 12 MONTHS \$59,906
 FINDLAY, RONALD E. AND WELLISZ, STANISLAW; *THE POLITICAL ECONOMY OF TARIFFS AND TRADE* (SES-8116390); 24 MONTHS \$55,000
 SALIBA, GEORGE A; *ARABIC ORIGINS OF WESTERN SCIENCE* (SES-8116912); 12 MONTHS \$25,000

PHELPS, EDMUND S; *EXPECTATIONAL PROBLEMS IN INFLATION STABILIZATION* (SES-8900581); 24 MONTHS \$68,135
 LANCASTER, KELVIN J; *THEORY OF TRADE AND MARKET STRUCTURE WITH VARIABLE PRODUCT DIFFERENTIATION* (SES-8908915); 12 MONTHS \$31,294

CORNELL UNIVERSITY

EHRENBERG, RONALD G; *COST-OF-LIVING ADJUSTMENT CLAUSES IN UNION CONTRACTS* (SES-8014879 A01); 12 MONTHS \$37,551
 TARROW, SIDNEY; *CYCLES OF PROTEST AND POLICY REFORM* (SES-8119417); 24 MONTHS \$113,459
 ELDER, GLEN H; *FAMILY INFLUENCES AND CHILD BEHAVIOR IN LIFE-SPAN PERSPECTIVE* (SES-8904350); 12 MONTHS \$59,950

CORNELL UNIVERSITY-CORNELL UNIVERSITY - ENDOWED

PROVINE, WILLIAM B; *SEWALL WRIGHT, GENETICIST AND EVOLUTIONIST* (SES-7996738 A02); 12 MONTHS \$6,000

HUNTER COLLEGE

CAIN, PAMELA, AND SILVER, CATHERINE; *LIFE CYCLE VARIATION IN THE JOB CHOICES OF WOMEN: IMPLICATIONS FOR OCCUPATIONAL SEGREGATION* (SES-8907867); 12 MONTHS \$49,891

NATIONAL BUREAU OF ECONOMIC RESEARCH INC-NATIONAL BUREAU OF ECONOMIC RES INC-NEW YORK

GROSSMAN, SANFORD; *INCENTIVES, INFORMATION, COMPETITIVE PRICE SYSTEMS AND THE BUSINESS CYCLE* (SES-8118086); 12 MONTHS \$49,942

GROSSMAN, GENE M, AND EATON, JONATHAN; *DIRECT FOREIGN INVESTMENT AND THE THEORY OF THE FIRM* (SES-8907643); 24 MONTHS \$56,900

LAZEAR, EDWARD P; *AN ANALYSIS OF LABOR UNIONS: A THEORY AND EMPIRICAL STUDY OF FORMATION, BEHAVIOR, AND STRUCTURE* (SES-8210923); 12 MONTHS \$40,078

NEW YORK UNIVERSITY

WHITE, MICHELLE J; *CORPORATE BANKRUPTCY UNDER THE NEW BANKRUPTCY CODE* (SES-7943333 A02); 12 MONTHS \$28,975

KING, DAVID A; *THE SCIENCE-RELIGION INTERPLAY-CASE OF THE USE OF ASTRONOMY IN ISLAM* (SES-8904590); 12 MONTHS \$6,000

ORDOVER, JANUSZ A; *POLITICAL ECONOMY OF TAXATION* (SES-8906987); 12 MONTHS \$15,479

SCHOTTER, ANDREW, PITCHIK, CAROLYN, AND WASOW, BERNARD; *EXTERNAL AND INTERNAL REGULATION IN MARKETS WITH ASYMMETRIC INFORMATION: A THEORETICAL AND EXPERIMENTAL APPROACH* (SES-8907765); 12 MONTHS \$47,564

RUSSELL SAGE FOUNDATION

ROBINSON, MARSHALL; *THE NATIONAL COMMITTEE FOR RESEARCH ON THE 1980 CENSUS LIST OF TOPICS FOR MONOGRAPHS* (SES-8314866); 24 MONTHS \$210,000

SOCIAL SCIENCE RESEARCH COUNCIL

PREWITT, KENNETH; *CENTER FOR COORDINATION OF RESEARCH ON SOCIAL INDICATORS* (SES-7791686 A05); 12 MONTHS \$522,088

STATE UNIVERSITY AT ALBANY

BLAU, PETER M; *SOCIOLOGICAL ASPECTS OF CRIME IN METROPOLITAN AREAS* (SES-8111988); 12 MONTHS \$27,762

LAHRI, KAJAL; *AN ECONOMETRIC ANALYSIS OF ASA-NBER SURVEY DATA ON EXPECTATIONS, 1968-81* (SES-8908900); 12 MONTHS \$4,947

ANDERSEN, DAVID, AND ROHRBAUGH, JOHN; *INTEGRATING MANAGERIAL JUDGMENT WITH DYNAMICS MODELS OF SOCIAL SYSTEMS* (SES-8213432); 12 MONTHS \$56,098

STATE UNIVERSITY AT BINGHAMTON

WALLERSTEIN, IMMANUEL; *DOCTORAL DISSERTATION RESEARCH IN SOCIOLOGY* (SES-8109192); 24 MONTHS \$4,175

HORWITZ, BERTRAND N; *THE IMPACT OF FASB AND SEC RULE MAKING ON THE LEVEL OF FEDERAL AGENCY R&D CONTRACT AWARDS TO SMALL HIGH-TECHNOLOGY FIRMS* (SES-8120890); 12 MONTHS \$44,669

STATE UNIVERSITY AT BUFFALO

ROSS, H LAURENC, AND THOMAS, JOHN M; *ALTERNATIVE MODELS OF REGULATORY ENFORCEMENT IN HOUSING* (SES-8010989 A02); 12 MONTHS \$21,284

RATCHFORD, BRIAN T; *APPROACHES TO FORECASTING THE DEMAND FOR NEW GOODS: MODELLING OF THE NATURE OF UNDERLYING BEHAVIOR IN MARKETS* (SES-8215859); 12 MONTHS \$48,949

STATE UNIVERSITY AT STONY BROOK

LODGE, MILTON, AND NORPOTH, HELMUT; *THE MEASUREMENT AND STRUCTURAL MODELING OF ELECTORAL BEHAVIOR* (SES-8045069 A01); 12 MONTHS \$79,669

TANUR, JUDITH M; *COLLABORATIVE RESEARCH ON THE TRANSFER OF METHODOLOGIES BETWEEN LARGE-SCALE SURVEYS AND SOCIAL EXPERIMENTS* (SES-8119138); 18 MONTHS \$34,900

UNIVERSITY OF ROCHESTER

CLINE, HAROLD M, AND STOCKMAN, ALAN C; *REAL-WAGES AND BUSINESS FLUCTUATION: ESTIMATES FROM PANEL DATA* (SES-8118490); 12 MONTHS \$24,361

KYBURG, HENRY E; *THE TESTING OF QUANTITATIVE LAWS AND THEORIES* (SES-8904317); 12 MONTHS \$6,000

NIEMI, RICHARD G, AND FRANK, ARTHUR Q; *DOCTORAL DISSERTATION RESEARCH IN POLITICAL SCIENCE* (SES-8905545); 6 MONTHS \$3,000

NIEMI, RICHARD G; *OPTIMAL POLITICAL DISTRICTING: PRELIMINARY WORK ON A REAL-WORLD APPLICATION* (SES-8908883); 6 MONTHS \$41,730

HANUSHEK, ERIC A; *URBAN SPATIAL STRUCTURE, RACE, AND LABOR MARKET OUTCOMES* (SES-8909365); 24 MONTHS \$64,822

PLOSSER, CHARLES I; *RESEARCH ON REAL BUSINESS CYCLES* (SES-8909433); 24 MONTHS \$58,979

NORTH CAROLINA

DUKE UNIVERSITY

FENOALTEA, STEFANO; *STATISTICS ON ITALIAN INDUSTRIALIZATION* (SES-7913437 A01); 24 MONTHS \$25,200

KORNBERG, ALLAN, AND SMITH, JOEL; *THE MEDIA AND VOTING BEHAVIOR IN THE QUEBEC REFERENDUM* (SES-7915420 A02); 11 MONTHS \$5,821

KERCKHOFF, ALAN C, AND CAMPBELL, RICHARD T; *A COMPARATIVE ANALYSIS OF SOCIAL MOBILITY PROCESSES* (SES-8121510); 12 MONTHS \$40,677

UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL

BALOYRA, ENRIQUE A; *DOCTORAL DISSERTATION RESEARCH IN POLITICAL SCIENCE* (SES-8904082); 6 MONTHS \$3,516

UNIVERSITY OF NORTH CAROLINA AT CHARLOTTE

PYLE, GERALD F; *THE SIMULATION OF INFLUENZA DIFFUSION* (SES-8909901); 24 MONTHS \$32,000

OHIO

OHIO STATE UNIVERSITY

KESSEL, JOHN H; *STRUCTURAL AND TEMPORAL PATTERNS IN EXECUTIVE POLITICS* (SES-8024079 A01); \$7,560

DEWALD, WILLIAM G, AND THURSBY, JERRY G; *JOURNAL OF MONEY, CREDIT, AND BANKING DATA STORAGE AND EVALUATION* (SES-8112800); 24 MONTHS \$39,078

UNIVERSITY OF AKRON MAIN CAMPUS

MCCLENDON, MCKEE J, AND MUTRAN, ELIZABETH; *COHORT ANALYSIS OF WORKER DISABILITIES AND LABOR MARKET FUNCTIONING* (SES-8907471); 12 MONTHS \$45,873

UNIVERSITY OF CINCINNATI

HILLER, DANA V; *EFFECTS OF JOB STATUSES FOR DUAL-WORKER FAMILIES* (SES-8121084); 12 MONTHS \$48,950

RICHARDSON, ROBERT C; *EXPERIMENTAL HEURISTICS IN THE LOCALIZATION OF FUNCTION AND THE ANALYSIS OF FUNCTIONAL SYSTEM IN PHYSIOLOGICAL PSYCHOLOGY* (SES-8905060); 18 MONTHS \$5,922

OKLAHOMA

INDIVIDUAL AWARD

UNGURU, SABETAL; *OPTICS AND THE DEVELOPMENT OF PHYSICAL SCIENCE* (SES-8905508); 12 MONTHS \$25,000

UNIVERSITY OF OKLAHOMA NORMAN CAMPUS

SHELLEY, FRED M; *COLLABORATIVE RESEARCH ON THE SELECTION AND EVALUATION OF SOCIAL CHOICE INSTITUTIONS FOR LOCAL CONFLICT RESOLUTION* (SES-8120749); 14 MONTHS \$16,091

HILL, LARRY B; *THE IMPACT OF THE OMBUDSMAN ON PATTERNS OF LEGAL REFORM* (SES-8909183); 17 MONTHS \$26,147

OREGON

UNIVERSITY OF OREGON - EUGENE

ORBELL, JOHN M, AND DAWES, ROBYN M; *COLLABORATIVE RESEARCH ON EXPERIMENTAL SOCIAL DILEMMA BEHAVIOR* (SES-8105695 A01); 1 MONTHS \$23,848

PENNSYLVANIA

CARNEGIE-MELLON UNIVERSITY-CARNEGIE INSTITUTE OF TECHNOLOGY

FISCHER, GREGORY W, KAMLET, MARK S, AND JOHNSON, ERIC J; *COGNITIVE PROCESSES AND THE ASSESSMENT OF PREFERENCES IN MULTIPLE OBJECTIVE DECISION ANALYSIS* (SES-8213424); 12 MONTHS \$46,022

CARNEGIE-MELLON UNIVERSITY

TOWNSEND, ROBERT M; *OPTIMAL AND EQUILIBRIUM ALLOCATIONS IN MARKETS WITH PRIVATE INFORMATION* (SES-8014897 A01); 12 MONTHS \$45,546

NERLOVE, SARA B; *IPA MOBILITY ASSIGNMENT (SARA B NERLOVE)* (SES-8101809 A02); 12 MONTHS \$41,825

NERLOVE, SARA B; *IPA MOBILITY ASSIGNMENT (SARA B NERLOVE)* (SES-8101809 A02); \$1,291

KYDLAND, FINN; *COMPETITIVE MODELS OF BUSINESS FLUCTUATIONS* (SES-8111319); 12 MONTHS \$21,610

FIENBERG, STEPHEN E; *COLLABORATIVE RESEARCH ON THE TRANSFER OF METHODOLOGIES BETWEEN LARGE-SCALE SURVEY AND SOCIAL EXPERIMENTS* (SES-8119819); 18 MONTHS \$35,547

SINGLETON, KENNETH J, AND HANSEN, LARS P; *ESTIMATION AND INFERENCE FOR NON-LINEAR, DYNAMIC EQUILIBRIUM MODELS UNDER RATIONAL EXPECTATIONS* (SES-8121859); 12 MONTHS \$61,474

CYERT, RICHARD M. AND DE GROOT, MORRIS H.; *BAYESIAN ANALYSIS AND ECONOMIC THEORY* (SES-8207295); 12 MONTHS \$30,899
ROMER, THOMAS, AND PALFREY, THOMAS; *CONSUMER DISPUTE RESOLUTION, WARRANTIES, AND WARRANTY PERFORMANCE* (SES-8208397); 12 MONTHS \$35,532

ORDESHOOK, PETER C.; *COLLABORATIVE RESEARCH ON INFORMATION IN ELECTRONS: THEORETICAL AND EXPERIMENTAL ANALYSIS* (SES-8208498); 12 MONTHS \$41,816

DICKINSON COLLEGE

PAUL, E ROBERT; *RESEARCH PROGRAMS IN TRANSITION: HUGO SEE LIGER AND COSMOLOGY* (SES-8208416); 12 MONTHS \$5,426

PENNSYLVANIA STATE UNIVERSITY

CLOGG, CLIFFORD C.; *DEMOGRAPHIC INDICATORS OF UNDEREMPLOYMENT, 1969-1980* (SES-7823759 A03); 12 MONTHS \$37,495

ERICKSON, RODNEY A.; *MULTINUCLEATION IN METROPOLITAN ECONOMIES* (SES-8121087); 18 MONTHS \$45,365

SWARTHMORE COLLEGE

SCHERER, FREDERIC M.; *THE BEHAVIORAL EFFECTS OF CONGLOMERATE MERGERS, TAKEOVERS, AND SELL-OFFS* (SES-8209766); 24 MONTHS \$58,066

UNIVERSITY OF PENNSYLVANIA

AZARIADIS, COSTAS; *PRIVATE INFORMATION AND FIXED-PRICE CONTRACTS* (SES-8006236 A01); 24 MONTHS \$61,523

CASS, DAVID, SHELL, KARL, AND BALASKO, YVES; *GENERAL EQUILIBRIUM FOUNDATIONS OF INTERTEMPORAL DECISIONS: THE OVERLAPPING-GENERATIONS MODEL* (SES-8007012 A02); 12 MONTHS \$103,670

CASS, DAVID, SHELL, KARL, AND BALASKO, YVES; *GENERAL EQUILIBRIUM FOUNDATIONS OF INTERTEMPORAL DECISIONS: THE OVERLAPPING-GENERATIONS MODEL* (SES-8007012 A03); \$11,735

POSTLEWATE, ANDREW; *GENERAL EQUILIBRIUM ALLOCATION MECHANISMS AND RISK AVERSION* (SES-8026086 A01); 12 MONTHS \$59,001

MANSFIELD, EDWIN; *ECONOMETRIC STUDIES OF INDUSTRIAL RESEARCH AND TECHNOLOGICAL CHANGE* (SES-8111857); 24 MONTHS \$19,942

INMAN, ROBERT P.; *EMPIRICAL MODELLING OF PUBLIC EMPLOYEE UNIONS AND LOCAL PUBLIC SECTOR RESOURCE ALLOCATION* (SES-8112001); 24 MONTHS \$69,820

KLEINDORFER, PAUL R. AND KUNREUTHER, HOWARD C.; *MISINFORMATION AND DECISION PROCESSES IN INSURANCE MARKETS* (SES-8112512); 12 MONTHS \$55,150

KOHLER, ROBERT E.; *SCIENCE AND AMERICAN LIFE, 1870-1940* (SES-8119490); 12 MONTHS \$24,608

MCGAW, JUDITH A.; *SCIENCE AND TECHNOLOGY IN AMERICAN AGRICULTURE DEVELOPMENT: AN INTERREGIONAL COMPARISON* (SES-8204609); 12 MONTHS \$25,000

PRESTON, SAMUEL H. AND BURNS, R KENNETH; *DOCTORAL DISSERTATION RESEARCH IN SOCIOLOGY* (SES-8204948); 12 MONTHS \$2,336

POLLAK, ROBERT A.; *HOUSEHOLD DECISION MAKING: A TRANSACTION APPROACH* (SES-8205546); 12 MONTHS \$28,482

BENNETT, JAMES P. AND WEISS-WIK, STEPHEN; *DOCTORAL DISSERTATION RESEARCH IN POLITICAL SCIENCE* (SES-8207615); 6 MONTHS \$5,220

ANDO, ALBERT K.; *SAVING BEHAVIOR: INTER-TEMPORAL AND INTERNATIONAL COMPARISONS USING CROSS-SECTION AND AGGREGATE TIME SERIES DATA* (SES-8208844); 24 MONTHS \$94,664

PIERSKALLA, WILLIAM P.; *THEORY OF MASS SCREENING FOR CONTAGIOUS AND NON-CONTAGIOUS DISEASES* (SES-8213446); 16 MONTHS \$61,161

SAPPINGTON, DAVID; *OPTIMAL INCENTIVE SCHEMES UNDER ASYMMETRIC INFORMATION (INFORMATION SCIENCE)* (IST-8215300*); 12 MONTHS \$5,000

NERLOVE, MARC L.; *MULTIVARIATE LOG-LINEAR PROBABILITY MODELS IN ECONOMETRICS* (SES-8242078); 12 MONTHS \$64,943

UNIVERSITY OF PENNSYLVANIA-WHARTON SCHOOL OF FINANCE AND COMMERCE

KIHLSTROM, RICHARD E.; *THE ECONOMIC THEORY OF FREE ENTRY WITH UNCERTAINTY AND INCOMPLETE MARKETS* (SES-8007569 A02); 12 MONTHS \$73,741

UNIVERSITY OF PITTSBURGH

MULLER, EDWARD K.; *EMPLOYABILITY IN PUBLIC HOUSING, 1940-1970: AN ANALYSIS OF THREE MODELS OF SOCIAL-GEOGRAPHICAL CHANGE* (SES-8208448); 12 MONTHS \$27,000

RHODE ISLAND

BROWN UNIVERSITY

SACHS, ABRAHAM J.; *HISTORY OF OBSERVATIONAL ASTRONOMY* (SES-8023754 A01); 12 MONTHS \$25,000

SOUTH CAROLINA

UNIVERSITY OF SOUTH CAROLINA AT COLUMBIA

SKVORETZ, JOHN, AND MAYHEW, BRUCE H.; *STRATIFICATION AND VERTICAL MOBILITY IN ORGANIZATIONS* (SES-8111300); 12 MONTHS \$17,973

JAKUBS, JOHN F.; *LOCATIONAL ASPECTS OF RESIDENTIAL SEGREGATION* (SES-8130405); 12 MONTHS \$30,000

MCPHERSON, J MILLER; *SAMPLING POPULATIONS OF ORGANIZATIONS* (SES-8130666); 12 MONTHS \$75,894

SMITH-LOVIN, LYNN; *AFFECT CONTROL THEORY: A CROSS-CULTURAL REPLICATION* (SES-8122089); 12 MONTHS \$21,494

WEBSTER, MURRAY J.; *MORAL CHARACTERISTICS AND STATUS GENERALIZATION* (SES-8206721); 12 MONTHS \$33,901

TENNESSEE

VANDERBILT UNIVERSITY

LEBLANC, LARRY J.; *COLLABORATIVE RESEARCH ON VALIDATION OF NETWORK EQUILIBRIUM MODELS OF URBAN LOCATION* (SES-8209401); 12 MONTHS \$7,790

TEXAS

RICE UNIVERSITY

MIESZKOWSKI, PETER, AND ZODROW, GEORGE; *THE ALLOCATIVE AND DISTRIBUTIVE EFFECTS OF STATE AND LOCAL TAXES: A THEORETICAL RECONCILIATION* (SES-8209210); 24 MONTHS \$84,800

TEXAS A & M UNIVERSITY

KRAMMER, ARNOLD P.; *THE BUREAU OF MINES AND SYNTHETIC FUELS IN AMERICA* (SES-8120618); 12 MONTHS \$6,000

WIGGINS, STEVEN N.; *PUBLIC POLICY AND PHARMACEUTICAL INNOVATION* (SES-8121249); 12 MONTHS \$30,963

STRANGES, ANTHONY N.; *A HISTORY OF HIGH-PRESSURE COAL HYDROGENATION IN GERMANY: 1910-1945* (SES-8121488); 12 MONTHS \$6,000

LIBECAP, GARY D. AND WIGGINS, STEVEN N.; *REGULATION AND OIL FIELD INITIALIZATION* (SES-8207826); 18 MONTHS \$29,235

KAGEL, JOHN H. AND BATTALIO, RAYMOND C.; *EXPERIMENTAL STUDIES OF INDIVIDUAL CHOICE BEHAVIOR IN CERTAIN AND UNCERTAIN CONTEXTS* (SES-8208077); 12 MONTHS \$40,000

UNIV OF TEXAS AT AUSTIN

LAND, KENNETH C.; *BASIC DEMOGRAPHIC ACCOUNTS FOR THE UNITED STATES, 1940-80* (SES-8104767); 12 MONTHS \$79,271

HANSEN, NILES M.; *AN ANALYSIS OF EUROPEAN TRANSBOUNDARY COOPERATIVE MECHANISMS APPLICABLE TO REGIONAL DEVELOPMENT ISSUES IN THE U.S. - MEXICO BORDERLANDS* (SES-8120667); 6 MONTHS \$14,345

DOOLITTLE, WILLIAM E.; *AN ANALYSIS OF THE CHANGING PATTERN OF ARROYO AGRICULTURE* (SES-8200546); 8 MONTHS \$6,896

UNIV OF TEXAS AT DALLAS

REES, JOHN; *THE INTER-REGIONAL DIFFUSION OF TECHNOLOGICAL INNOVATIONS OF THE ELECTRONIC COMPONENT INDUSTRY* (SES-8105882 A01); 6 MONTHS \$4,050

UNIVERSITY OF HOUSTON CENTRAL CAMPUS

STONE, ALAN; *THE POLITICAL ECONOMY OF TELECOMMUNICATIONS* (SES-8209581); 12 MONTHS \$54,991

VIRGINIA

NATIONAL CENTER FOR STATE COURTS

STEELMAN, DAVID; *EXPERIMENTAL STUDY OF SETTLEMENT CONFERENCES IN STATE APPELLATE COURTS* (SES-8113106); 15 MONTHS \$40,466

FLANGO, VICTOR E.; *PATTERNS OF CASE SELECTION IN STATE SUPREME COURTS* (SES-8209233); 12 MONTHS \$55,673

UNIVERSITY OF VIRGINIA

GUTERBOCK, THOMAS M.; *POPULATION DECONCENTRATION IN U.S. METROPOLITAN AREAS* (SES-7926182 A01); 6 MONTHS \$6,018

HUMPHREYS, PAUL W.; *CAUSAL MODELS AS A FOUNDATION FOR EXPLANATION AND INDUCTION* (SES-8205563); 12 MONTHS \$5,851

VIRGINIA MILITARY INSTITUTE

THOMAS, DONALD E.; *RUDOLF DIESEL AND THE DIESEL ENGINE: TECHNOLOGY AND SOCIETY DURING THE GERMAN INDUSTRIAL REVOLUTION* (SES-8205362); 12 MONTHS \$6,000

VIRGINIA POLYTECHNIC INSTITUTE

HIRSH, RICHARD F.; *LIMITS TO TECHNOLOGICAL PROGRESS IN THE ELECTRIC POWER INDUSTRY, 1930-1975* (SES-8204149); 12 MONTHS \$6,000

WASHINGTON

UNIVERSITY OF WASHINGTON

SULLIVAN, WOODRUFF T.; *A HISTORY OF RADIO ASTRONOMY* (SES-8205459); 12 MONTHS \$6,000

SCHEINGOLD, STUART A.; *CONSEQUENCES OF THE POLITICS OF LAW AND ORDER ON LEGAL POLICY* (SES-8208832); 24 MONTHS \$55,919

WASHINGTON STATE UNIVERSITY

DILLMAN, DON, AND SHORT, JAMES F.; *THE SOCIAL IMPACTS OF VOLCANIC ASH FALLOUT ON EASTERN WASHINGTON* (SES-8020864 A01); 6 MONTHS \$1,634

DUNCAN, GREGORY M.; *A RELATIVELY DISTRIBUTION-FREE CENSORED REGRESSION ESTIMATOR* (SES-8109374); 12 MONTHS \$23,723

SHELDON, CHARLES H.; *DETERMINANTS OF THE ROLE AND CHANGING FUNCTION OF JUDICIAL CLERKS* (SES-8207282); 12 MONTHS \$14,512

WISCONSIN

BELOIT COLLEGE

MAY, MARLYNN L.; *THE DISPUTING PROCESS IN MEDICAL MALPRACTICE* (SES-8120867); 24 MONTHS \$50,843

UNIVERSITY OF WISCONSIN-MADISON

WINSBOROUGH, HALLIMAN H. HAUSER, ROBERT M. AND TAEUBER, KARL E.; *PUBLIC USE SAMPLE FILES FROM THE 1940 AND 1950 CENSUS OF POPULATION* (SES-7704135 A05); \$121,000

WILSON, FRANKLIN D. AND ROOT, KENNETH A.; *MIGRATION, SOCIO-ECONOMIC ATTACHMENT, AND DIFFERENTIAL OPPORTUNITY STRUCTURES* (SES-782653 A02); 6 MONTHS \$10,875

GEWEKE, JOHN F.; *THE MEASUREMENT AND CHARACTERIZATION OF RELATIONSHIPS BETWEEN MULTIPLE ECONOMIC TIME SERIES* (SES-8005606 A01); 24 MONTHS \$35,847

HAUSER, ROBERT M. AND SEWELL, WILLIAM H.; *SOCIAL AND PSYCHOLOGICAL FACTORS IN ASPIRATION AND ACHIEVEMENT* (SES-8010640 A02); 12 MONTHS \$84,297

MICHENER, H. A.; *TESTS OF GAME-THEORETIC SOLUTION CONCEPTS IN MULTI-PERSON CONFLICTS* (SES-8015523 A01); 12 MONTHS \$64,561

SACK, ROBERT D.; *HUMAN TERRITORIAL BEHAVIOR* (SES-8117807); 24 MONTHS \$30,957

SOBER, ELLIOTT; *FITNESS, SELECTION, ADAPTATION: THE CAUSAL STRUCTURE OF EVOLUTIONARY CONCEPTS* (SES-8120365); 12 MONTHS \$5,997

GALANTER, MARC; *THEORY OF JUDICIAL PARTICIPATION IN THE SETTLEMENT OF CIVIL CASES* (SES-8121712); 13 MONTHS \$14,999

LINDBERG, DAVID C.; *EARLY MODERN OPTICS AND THE MEDIEVAL TRADITION* (SES-8204223); 12 MONTHS \$6,000

SIEGFRIED, ROBERT; *THE RISE OF MODERN CHEMISTRY* (SES-8204558); 12 MONTHS \$6,000

LEVENTHAL, HOWARD, AND VANTRI, NGUYEN; *DOCTORAL DISSERTATION RESEARCH IN SOCIOLOGY* (SES-8205497); 12 MONTHS \$5,600

DEAN, DENNIS R.; *GIDEON MANTELL, DISCOVERER OF DINOSAURS* (SES-8206469); 12 MONTHS \$6,000

CADWALLADER, MARTIN T.; *A COMPARISON AND SYNTHESIS OF ALTERNATIVE APPROACHES TO MODELLING MIGRATION PATTERNS* (SES-8206910); 14 MONTHS \$35,430

SENBET, LEMMA W.; *AN EQUILIBRIUM ANALYSIS OF CORPORATE SUPPLY ADJUSTMENTS IN THE FINANCIAL AND REAL SECTORS: A GENERALIZED FINANCIAL THEORY OF THE FIRM* (SES-8207475); 12 MONTHS \$19,235

WRIGHT, ERIK O.; *SOCIAL STRUCTURE AND CLASS CONSCIOUSNESS IN CONTEMPORARY INDUSTRIAL SOCIETIES* (SES-8208238); 12 MONTHS \$52,317

UNIVERSITY OF WISCONSIN-MILWAUKEE
SHAMMAS, CAROLE; *INHERITANCE LAW, FAMILY STRUCTURE, AND CAPITAL FORMATION* (SES-8208690*); 24 MONTHS \$67,690

BEHAVIORAL AND NEURAL SCIENCES

ALABAMA

UNIVERSITY OF ALABAMA
TURNER, KENNETH R.; *STORAGE OF THE OSTEOLOGICAL COLLECTION* (BNS-8205914); 12 MONTHS \$49,641

UNIVERSITY OF ALABAMA IN BIRMINGHAM
LOOP, MICHAEL S.; *PHOTOPIC SPECTRAL SENSITIVITY* (BNS-8207314); 24 MONTHS \$30,660

ALASKA

UNIVERSITY OF ALASKA FAIRBANKS CAMPUS
KRAUSS, MICHAEL E.; *ALASKA NATIVE LANGUAGES DICTIONARY PROJECT* (BNS-8203635 A01); 12 MONTHS \$141,989

ARIZONA

ARIZONA STATE UNIVERSITY
CLARK, GEOFFREY A., PLOG, FRED T. AND ACKERLY, NEAL W.; *DOCTORAL DISSERTATION RESEARCH IN ANTHROPOLOGY* (BNS-8118071); 12 MONTHS \$6,765

SATTERLIE, RICHARD A.; *NEURONAL CONTROL OF LOCOMOTION IN MEDUSAE* (BNS-8121369); 24 MONTHS \$50,845

NORTHERN ARIZONA UNIVERSITY
BALDA, RUSSELL P.; *CHARACTERISTICS AND DYNAMICS OF MEMORY SYSTEMS* (BNS-8208286); 12 MONTHS \$26,965

UNIVERSITY OF ARIZONA
HAYNES, C.; *LATE QUATERNARY GEOCHRONOLOGY* (EAR-7926362 A02*); \$5,000

FERGUSON, C. W.; *DENDROCHRONOLOGY OF BRISTLECONE PINE* (EAR-8018637 A01*); 12 MONTHS \$20,000

LEHRER, ADRIENNE, AND BYRNE, FRANCIS X.; *DOCTORAL DISSERTATION RESEARCH IN LINGUISTICS* (BNS-8116075); 24 MONTHS \$7,749

LONG, AUSTIN; *RADIOCARBON DATING LABORATORIES CORE SUPPORT* (BNS-8211864); 12 MONTHS \$79,170

CALIFORNIA

CALIFORNIA ACADEMY OF SCIENCES
WASHBURN, DOROTHY K.; *CORRELATES OF FORMAL DESIGN STRUCTURE* (BNS-8211502); 12 MONTHS \$31,980

CALIFORNIA STATE UNIVERSITY, FRESNO
THURGOOD, GRAHAM; *TIBETO-BURMAN SYNTACTIC RECONSTRUCTION* (BNS-8203832); 24 MONTHS \$75,699

CENTER FOR ADV STUDY IN THE BEHAVIORAL SCIENCE
LINDZEY, GARDNER, AND LINDEE, ROBERT G.; *SUPPORT FOR INTERDISCIPLINARY RESEARCH AT THE CENTER FOR ADVANCED STUDY IN THE BEHAVIORAL SCIENCES* (OAS-8011434*); 12 MONTHS \$200,000

LINDZEY, GARDNER, AND LINDEE, ROBERT G.; *SUPPORT FOR INTERDISCIPLINARY RESEARCH AT THE CENTER FOR ADVANCED STUDY IN THE BEHAVIORAL SCIENCES* (OAS-8011434 A01*); \$150,000

CITY OF HOPE RESEARCH INSTITUTE

HAMMERSCHLAG, RICHARD; *INITIATION OF FAST AXONAL TRANSPORT* (BNS-8112129); 12 MONTHS \$54,891

MCAFFEE, DONALD A.; *LONG-TERM POTENTIATION IN SYMPATHETIC GANGLIA* (BNS-8112414); 12 MONTHS \$58,627

FLANAGAN, STEVEN D.; *THE POSTSYNAPTIC CYTOSKELETON AND SYNAPSE ORGANIZATION* (BNS-8205917); 12 MONTHS \$50,000

HAMMERSCHLAG, RICHARD; *MULTIUSER GRANT FOR LIQUID SCINTILLATION COUNTER* (BNS-8209607); 12 MONTHS \$23,270

SOCIETY FOR ARCHAEOLOGICAL SCIENCES
MEADOW, RICHARD H.; *GROUP TRAVEL FOR U.S. PARTICIPANTS IN THE FOURTH INTERNATIONAL CONFERENCE ON ARCHAEOZOOLOGY*; LONDON, ENGLAND, 18-22 APRIL 1982 (BNS-8117705); 9 MONTHS \$13,000

SRI INTERNATIONAL
DAVIS, EDWARD E.; *SENSORY BASIS OF BEHAVIOR* (BNS-8115193); 24 MONTHS \$99,998

STANFORD UNIVERSITY-SCHOOL OF MEDICINE
SARGENT, PETER B.; *SYNAPSE FORMATION BETWEEN NEURONS IN VIVO* (BNS-7924486 A02); 12 MONTHS \$59,179

STANFORD UNIVERSITY
LEPPER, MARK R.; *EXTRINSIC CONSTRAINTS AND INTRINSIC MOTIVATION* (BNS-7914118 A02); 12 MONTHS \$60,900

BOWER, GORDON H.; *PICTORIAL REPRESENTATIONS IN ADULTS AND CHILDREN* (BNS-8008013 A02); 12 MONTHS \$31,813

SHEPARD, ROGER N.; *PROBLEMS OF REPRESENTATION IN COGNITIVE PSYCHOLOGY* (BNS-8005517 A02); 12 MONTHS \$122,548

CLARK, EVE V.; *WORD FORMATION IN LANGUAGE ACQUISITION: NEW MEANINGS AND NEW FORMS* (BNS-8007349 A02); 12 MONTHS \$36,000

WINE, JEFFREY J.; *CELLULAR ANALYSIS OF SENSORY INTERNEURONS* (BNS-8015583 A01); 12 MONTHS \$57,600

YANAGISAKO, SYLVIA J. AND COLLIER, JANE F.; *CONFERENCE ON FEMINISM AND KINSHIP THEORY IN ANTHROPOLOGY* (BNS-8019719); 12 MONTHS \$15,000

KENDIG, JOAN J.; *EXCITABLE CELL FUNCTION AT HYPERBARIC PRESSURE* (BNS-8020497 A01); 12 MONTHS \$36,665

WASOW, THOMAS, AND SAG, IVAN A.; *GENERALIZED PHRASE STRUCTURE GRAMMAR* (BNS-8102406 A01); 6 MONTHS \$32,175

DURHAM, WILLIAM H. AND DOMINIQUE, IRVINE; *DOCTORAL DISSERTATION RESEARCH IN ANTHROPOLOGY* (BNS-8111372); 24 MONTHS \$8,970

WINE, JEFFREY J.; *LOCAL CIRCUIT NEURONS* (BNS-8112431 A01); 12 MONTHS \$63,028

THOMPSON, RICHARD F.; *NEUROBIOLOGICAL ANALYSIS OF PLASTICITY: LEARNING AND MEMORY* (BNS-8117115); 12 MONTHS \$86,004

THOMPSON, RICHARD F.; *NEUROBIOLOGICAL ANALYSIS OF PLASTICITY: LEARNING AND MEMORY* (BNS-8117115 A01); 3 MONTHS \$10,000

DONHAM, DONALD L.; *A COMPARISON OF PEASANT PRODUCTION SYSTEMS IN SOUTHWEST ETHIOPIA* (BNS-8121547); 36 MONTHS \$34,891

GOODMAN, COREY S.; *GUIDANCE OF NEURONAL GROWTH CONES* (BNS-8209376); 12 MONTHS \$59,618

PITTENDRIGH, COLIN S.; *REPLACEMENT OF HOPKINS MARINE STATION SEAWATER SYSTEM* (DEB-8209660*); 12 MONTHS \$40,000

FERGUSON, CHARLES A.; *PERSISTENCE OF INDIVIDUAL DIFFERENCES IN EARLY PHONOLOGICAL DEVELOPMENT* (BNS-8209695); 12 MONTHS \$84,636

UNIVERSITY OF CALIFORNIA, BERKELEY
ROWELL, THELMA E.; *ADOLESCENCE AND EARLIER SOCIAL DEVELOPMENT* (BNS-7813037 A03); 12 MONTHS \$60,055

STENT, GUNTHER S.; *FUNCTION AND ONTOGENY OF THE LERCH NERVOUS SYSTEM* (BNS-7912400 A02); 12 MONTHS \$60,000

BARLOW, GEORGE W.; *INTEGRATION OF AGONISTIC BEHAVIOR* (BNS-7924081 A02); 12 MONTHS \$60,250

RILEY, DONALD A.; *INFORMATION ACQUISITION AND SHORT-TERM MEMORY* (BNS-7924199 A02); 12 MONTHS \$48,659

CALDWELL, ROY L.; *CAUSES OF INDIVIDUAL VARIATION IN AGGRESSIVE BEHAVIOR* (BNS-8023414 A01); 12 MONTHS \$30,968

OGBU, JOHN, AND KAHN, LINDA; *DOCTORAL DISSERTATION RESEARCH IN ANTHROPOLOGY* (BNS-8117833); 12 MONTHS \$3,229

ISAAC, GLYNN L. AND AMBROSE, STANLEY H.; *DOCTORAL DISSERTATION RESEARCH IN ANTHROPOLOGY* (BNS-8118096); 12 MONTHS \$9,965

VAN SLUYTERS, RICHARD C.; *RECOVERY OF BINOCULAR FUNCTION IN VISUAL CORTEX* (BNS-8200083); 12 MONTHS \$49,200

BENEDICT, BURTON, AND ROBBEN, ANTONIUS; *DOCTORAL DISSERTATION RESEARCH IN ANTHROPOLOGY* (BNS-8200732); 12 MONTHS \$6,586

DE VALOIS, RUSSELL L. DE VALOIS, KAREN K. AND SWITKES, EUGENE; *PHYSIOLOGICAL AND PSYCHOPHYSICAL STUDIES OF SPATIAL VISION* (BNS-8202275); 12 MONTHS \$90,000

MILLER, JOHN P.; *GENERATION AND CONTROL OF RHYTHMIC NEURONAL ACTIVITY* (BNS-8202416); 12 MONTHS \$46,001

DEETZ, JAMES, HOWELL, F. CLARK, AND WHITE, TIM D.; *RENOVATION OF THE PRIMATE SKELETAL COLLECTION* (BNS-8203541); 12 MONTHS \$20,004

SLOBIN, DAN I.; *CROSS-LINGUISTIC CONCORDANCES OF CHILD LANGUAGE* (BNS-8208142); 11 MONTHS \$24,965

BENEDICT, BURTON, AND NORDSTROM, CAROLYN; *DOCTORAL DISSERTATION RESEARCH IN ANTHROPOLOGY* (BNS-8209434); 17 MONTHS \$7,902

- HONZIK, MARJORIE, AND MAIN, MARY B; A 50-YEAR STUDY OF STRESSFUL AND SUPPORTIVE PARENTING (BNS-811007; 12 MONTHS \$79,614)
- CLARK, J D, AND WHITE, TIM D; PALEOANTHROPOLOGICAL RESEARCH IN THE MIDDLE AWASH, ETHIOPIA (BNS-8110857; 12 MONTHS \$132,792)
- ISAAC, GLYNN L; EARLY ACHEULIAN ADAPTATION AND LAND USE PATTERNS IN THE LAKE NATRON BASIN, TANZANIA (BNS-811313; 12 MONTHS \$39,338)
- ISAAC, GLYNN L; MULTI-USER EQUIPMENT PURCHASE (BNS-8113704; 12 MONTHS \$16,256)
- UNIVERSITY OF CALIFORNIA, DAVIS
- RODMAN, PETER S, AND BERENSTAIN, LEO; DOCTORAL DISSERTATION RESEARCH IN ANTHROPOLOGY (BNS-8113444; 22 MONTHS \$8,862)
- OWINGS, DONALD H, AND HENNESSY, DAVID; FUNCTIONAL SIGNIFICANCE OF VARIATION IN SIGNAL STRUCTURE (BNS-8110065; 24 MONTHS \$43,200)
- UNIVERSITY OF CALIFORNIA, IRVINE-CALIFORNIA COLLEGE OF MEDICINE
- ROBERTSON, RICHARD T; THALAMIC AND PARIETAL CONNECTIONS WITH LIMBIC CORTEX (BNS-7914823 A02; 12 MONTHS \$50,000)
- UNIVERSITY OF CALIFORNIA, IRVINE
- WEXLER, KENNETH N, AND CULICOVER, PETER W; ACQUISITION CONSTRAINTS ON THEORY OF LANGUAGE STRUCTURE (BNS-7827044 A04; 12 MONTHS \$28,635)
- POO, MU-MING; ELECTROPHORESIS OF MUSCLE MEMBRANE RECEPTORS IN SITU (BNS-8012348 A02; 12 MONTHS \$87,000)
- FRASER, SCOTT E; THE ROLE OF CELL COMMUNICATION IN PATTERNED NEURAL CONNECTIONS (BNS-8021638 A01; 12 MONTHS \$43,000)
- BAUDRY, MICHEL; RECEPTOR REGULATION AND PHYSIOLOGICAL PLASTICITY IN THE HIPPOCAMPUS (BNS-8112156; 12 MONTHS \$38,000)
- LYNCH, GARY S; NEUROBIOLOGICAL ANALYSIS OF BRAIN PLASTICITY (BNS-8113994; 12 MONTHS \$50,000)
- KILLACKEY, HERBERT P; PATTERN FORMATION IN THE TRIGEMINAL SYSTEM (BNS-8110658; 12 MONTHS \$80,000)
- GALL, CHRISTINE M; HIPPOCAMPAL ENKEPHALIN: TERMINAL LOCALIZATION AND SYNAPTIC FUNCTION (BNS-8200519; 24 MONTHS \$80,007)
- MARSHALL, JOHN F; SYNAPTIC PLASTICITY IN RECOVERY FROM DOPAMINE NEURON DAMAGE (BNS-8208636; 12 MONTHS \$50,000)
- COLBY, BENJAMIN N; ANALYSIS OF IXIL MAYAN TEXTS (BNS-8201119; 12 MONTHS \$46,164)
- UNIVERSITY OF CALIFORNIA, LOS ANGELES-SCHOOL OF MEDICINE
- LOLLEY, RICHARD N; ROLE FOR CYCLIC GMP IN PHOTORECEPTOR FUNCTION OR METABOLISM (BNS-7926306 A01; 12 MONTHS \$49,564)
- UNIVERSITY OF CALIFORNIA, LOS ANGELES
- GORSKI, ROGER A; NEUROCHEMICAL MECHANISMS UNDERLYING LORDOSIS BEHAVIOR (BNS-7830025 A02; 12 MONTHS \$14,278)
- CHASE, MICHAEL H; SYNAPTIC CONTROL OF LUMBAR MOTONEURON MEMBRANE POTENTIAL DURING SLEEP AND WAKEFULNESS (BNS-7913897 A03; 12 MONTHS \$65,000)
- DE NIRO, MICHAEL J; ANALYSIS OF BIOLOGICAL PROCESSES WHICH AFFECT CLIMATIC RECONSTRUCTION BASED ON STABLE ISOTOPE RATIOS OF TREE RINGS (ATM-7924591 A02; 12 MONTHS \$7,300)
- DE NIRO, MICHAEL J; DIET AND STABLE ISOTOPE ANALYSIS OF BONE (BNS-7924754 A01; 12 MONTHS \$59,498)
- FROMKIN, VICTORIA A, AND CURTIS, SUSAN R; THE RELATIONSHIP BETWEEN LANGUAGE AND COGNITION IN DEVELOPMENT (BNS-7926659 A02; 12 MONTHS \$56,106)
- NARINS, PETER M; AUDITORY SIGNAL RESOLUTION IN HIGH-LEVEL NOISE (BNS-8005259 A02; 12 MONTHS \$35,157)
- ARNOLD, ARTHUR P; ONTOGENY OF DIMORPHIC NEURAL CIRCUITS (BNS-8006738 A02; 12 MONTHS \$73,000)
- ECKERT, ROGER; IONIC MECHANISMS IN NORMAL AND GENETICALLY MODIFIED MEMBRANES (BNS-8013346 A01; 12 MONTHS \$65,150)
- LADEFOGED, PETER N, AND FROMKIN, VICTORIA A; PHONETIC DIFFERENCES WITHIN AND BETWEEN LANGUAGES (BNS-8023110 A01; 12 MONTHS \$119,500)
- SCHMIDT, RICHARD A; OPEN AND CLOSED-LOOP PROCESSES IN MOVEMENTS (BNS-8023135 A01; 24 MONTHS \$104,190)
- GOLDSCHMIDT, WALTER R, AND PERLOV, DIANE C; DOCTORAL DISSERTATION RESEARCH IN ANTHROPOLOGY (BNS-8115443; 18 MONTHS \$9,250)
- LEVINE, NANCY E; HOUSEHOLD DYNAMICS AND FERTILITY (BNS-8114339; 30 MONTHS \$85,001)
- ZAIDEL, ERAN; HEMISPHERIC SPECIALIZATION OF HIGHER FUNCTIONS IN MAN (BNS-8115102; 12 MONTHS \$45,664)
- SIEGEL, JEROME M; RETICULAR FORMATION NEURONS: BEHAVIORAL STUDIES (BNS-8200028; 12 MONTHS \$83,000)
- EARLE, TIMOTHY K, D'ALROY, TERENCE, AND LE BLANC, CATHERINE; IMPERIAL EXPANSION AND ECONOMIC TRANSFORMATION IN THE YANAMARCA VALLEY, PERU (BNS-8207732; 19 MONTHS \$122,800)
- ECKERT, ROGER, AND THORNER, J PHILIP; ACQUISITION OF DIGITAL OSCILLOSCOPE (BNS-8203442; 12 MONTHS \$28,000)
- UNIVERSITY OF CALIFORNIA, RIVERSIDE
- PETRINOVICH, LEWIS F; BEHAVIORAL ADAPTATION IN A NATURAL SETTING (BNS-7911136 A02; 12 MONTHS \$43,995)
- FULLER, CHARLES A; THE NEURAL BASIS FOR THE CIRCADIAN CONTROL OF TEMPERATURE REGULATION (BNS-7924419 A02; 12 MONTHS \$48,715)
- TAYLOR, R E; SAMPLE PREPARATION FOR RADIOCARBON DATING BY PARTICLE ACCELERATORS (BNS-8011764 A01; 12 MONTHS \$91,594)
- OLSEN, RICHARD W; NEUROACTIVE DRUGS AND GAMMA-AMINOBUTYRIC ACID (BNS-8019722 A01; 12 MONTHS \$47,000)
- TAYLOR, R E; IMPROVEMENTS IN RADIOCARBON DATING AT THE UCR RADIOCARBON LABORATORY (BNS-8111804; 12 MONTHS \$71,993)
- UNIVERSITY OF CALIFORNIA, SAN DIEGO-SCRIPPS INSTITUTION OF OCEANOGRAPHY
- HEILIGENBERG, WALTER F; NEURAL MECHANISMS OF SENSORY INFORMATION PROCESSING (BNS-8205454; 12 MONTHS \$55,196)
- UNIVERSITY OF CALIFORNIA, SAN DIEGO
- MANDLER, GEORGE; ORGANIZATION AND STRUCTURE IN MEMORY (BNS-7915336 A02; 12 MONTHS \$41,249)
- KRISTAN, WILLIAM B, AND SPTZER, NICHOLAS C; DEVELOPMENT OF REFLEX BEHAVIOR IN A SIMPLE NERVOUS SYSTEM (BNS-7923459 A02; 12 MONTHS \$75,000)
- MCCLELLAND, JAMES L; INFORMATION PROCESSING AND READING BASED ON THE CASCADE MODEL (BNS-7924067 A02; 12 MONTHS \$30,118)
- BRADBURY, JACK W; EVOLUTION OF COOPERATIVE BEHAVIOR (DEB-8001165 A02; 12 MONTHS \$23,186)
- HILLYARD, STEVEN A, AND KUTAS, MARTA; SEMANTIC PROCESSING AND EVENT-RELATED BRAIN WAVES (BNS-8005535 A02; 12 MONTHS \$72,872)
- D'ANDRADE, ROY G; PERSON PERCEPTION AND SOCIOCULTURAL CONTEXT (BNS-8005731 A02; 12 MONTHS \$47,252)
- BULLOCK, THEODORE H; OCTAVOLATERALIS SYSTEMS AND CENTRAL SENSORY PROCESSING (BNS-8020339 A01; 12 MONTHS \$88,000)
- SELVERSTON, ALLEN I; NEURAL INTEGRATION AND GEOMETRY IN THE STOMATOGASTRIC GANGLION (BNS-8118756; 12 MONTHS \$55,000)
- VARON, SILVIO S; NEURAL REGENERATION: AN EXPERIMENTAL, IN VIVO MODEL (BNS-8118847; 12 MONTHS \$58,000)
- ANDERSON, NORMAN H; KNOWLEDGE STRUCTURE IN INTUITIVE PHYSICS (BNS-8207541; 24 MONTHS \$36,752)
- SPIRO, MELFORD E, AND HOLLAN, DOUGLAS W; DOCTORAL DISSERTATION RESEARCH IN ANTHROPOLOGY (BNS-8111177; 18 MONTHS \$6,460)
- UNIVERSITY OF CALIFORNIA, SAN FRANCISCO-SCHOOL OF MEDICINE
- GORDON, ADRIENNE S; PHOSPHORYLATION OF THE ACETYLCHOLINE RECEPTOR (BNS-8013074 A02; 12 MONTHS \$56,000)
- UNIVERSITY OF CALIFORNIA, SAN FRANCISCO
- REICHARDT, LOUIS F; NERVE FUNCTION IN CULTURE (BNS-8100343 A01; 12 MONTHS \$50,400)
- GLAZER, ELLYN J, AND BASBAUM, ALLAN I; ULTRASTRUCTURAL ANALYSIS OF PAIN CONTROL SYSTEMS IN THE SPINAL CORD (BNS-8104486 A01; 12 MONTHS \$58,000)
- PAWSON, IVAN G; SECULAR TREND AND GROWTH RATES IN A MODERNIZING HIGH ALTITUDE POPULATION (BNS-8118841; 12 MONTHS \$30,828)
- ABLON, JOAN I, AND JANES, CRAIG; DOCTORAL DISSERTATION RESEARCH IN ANTHROPOLOGY (BNS-8204572; 12 MONTHS \$8,963)
- UNIVERSITY OF CALIFORNIA, SANTA BARBARA
- LI, CHARLES N; SYNTACTIC SURVEY OF SELECTED CHINESE DIALECTS WITH SPECIAL FOCUS ON MIXED LANGUAGES IN WESTERN CHINA (BNS-7920944 A01; 12 MONTHS \$16,492)
- MACKAY, CAROL J; POLITICAL INTEGRATION IN PREHISPANIC PERU (BNS-8023639 A01; 12 MONTHS \$64,728)
- BROKENSHA, DAVID W, AND CASTRO, ALFONSO; DOCTORAL DISSERTATION RESEARCH IN ANTHROPOLOGY (BNS-8115890; 12 MONTHS \$3,850)
- SMITH, TERENCE R, PELLEGRINO, JAMES R, AND COLLEDGE, REGINALD G; A COMPUTATIONAL PROCESS APPROACH TO CHILDREN'S ACQUISITION OF SPATIAL KNOWLEDGE OF A LARGE-SCALE ENVIRONMENT (SES-8206621; 18 MONTHS \$29,541)
- UNIVERSITY OF CALIFORNIA, SANTA CRUZ
- DAVIS, WILLIAM J; NEURAL MECHANISMS OF MOTOR PROGRAM SWITCHING (BNS-8110235; 12 MONTHS \$66,000)
- GIFFORD, DIANE P; PREHISTORIC HUNTING AND HERD MANAGEMENT IN KENYA (BNS-8211152; 12 MONTHS \$20,421)
- UNIVERSITY OF SOUTHERN CALIFORNIA-SCHOOL OF MEDICINE
- ALBRECHT, GENE H; MUSEUM SURVEY OF PRIMATE SKELETAL MATERIALS (BNS-8110651; 24 MONTHS \$4,964)
- UNIVERSITY OF SOUTHERN CALIFORNIA
- HELLIGE, JOSEPH B; SPECIALIZATION OF THE RIGHT AND LEFT CEREBRAL HEMISPHERES (BNS-7924445 A02; 12 MONTHS \$29,419)
- LANSING, J S; CULTURAL ECOLOGY AND RITUAL ORGANIZATION OF RICE PRODUCTION (BNS-8210134; 12 MONTHS \$56,714)
- COLORADO
- COLORADO STATE UNIVERSITY
- EIGHMY, JEFFREY L; EXTENSION OF THE SOUTHWEST ARCHAEO-MAGNETIC MASTER CURVE TO A.D. 700 (BNS-8201386; 24 MONTHS \$44,849)
- ELLIS, JAMES E, AND SWIFT, DAVID M; THE ECOLOGY OF SUBSISTENCE PASTORALISM (DEB-8204864; 12 MONTHS \$59,335)
- UNIVERSITY OF COLORADO AT BOULDER
- BEKOFF, ANNE C; NEURAL BASIS FOR THE DEVELOPMENT OF COORDINATED BEHAVIORS (BNS-7913236 A02; 12 MONTHS \$46,000)

- BEKOFF, MARC; *SOCIAL ECOLOGY OF FREE-RANGING COYOTES* (BNS-792463 A02*); 12 MONTHS \$18,742
- HEALY, ALICE F; *THE SIZE AND THE NATURE OF READING UNITS* (BNS-8025020 A01); 12 MONTHS \$39,989
- EATON, ROBERT C; *CELLULAR MECHANISMS FOR THE SELECTION OF VERTEBRATE BEHAVIOR PATTERNS* (BNS-8112423); 12 MONTHS \$46,000
- PLOMIN, ROBERT J. AND HARDY-BROWN, KAREN; *VIDEOTAPE ANALYSIS OF BEHAVIORAL DEVELOPMENT IN ONE, TWO, AND THREE-YEAR OLD ADOPTED AND 'CONTROL' CHILDREN* (BNS-8200310); 12 MONTHS \$53,700
- MAIER, STEVEN F; *LEARNED HELPLESSNESS: PAIN AND ENDOGENOUS OPIATES* (BNS-8200944); 12 MONTHS \$65,000
- RUDY, JERRY W; *A DEVELOPMENTAL PSYCHOBIOLOGICAL ANALYSIS OF LEARNING* (BNS-8207634); 12 MONTHS \$30,211
- UNIVERSITY OF COLORADO HEALTH SCIENCES CENTER
- MORAN, DAVID T. AND FINGER, THOMAS E; *THE NEUROBIOLOGY OF OLFACTORY RECEPTORS* (BNS-8210327); 12 MONTHS \$59,700

CONNECTICUT

- UNIVERSITY OF CONNECTICUT
- MILLER, DAVID B; *PERINATAL AUDITORY EXPERIENCE AND BEHAVIORAL INHIBITION* (BNS-8015502 A01); 12 MONTHS \$59,912
- FRANK, MARION E; *PERIPHERAL MECHANISMS IN GUSTATION* (BNS-8112180 A01); 12 MONTHS \$58,271
- COOK, SCOTT; *PETTY COMMODITY PRODUCTION, CAPITAL AND DEVELOPMENT* (BNS-8120103); 24 MONTHS \$40,477
- PELTO, PERTTI J. AND WALDRAM, JAMES B; *DOCTORAL DISSERTATION RESEARCH IN ANTHROPOLOGY* (BNS-8203066); 8 MONTHS \$6,340
- KENNY, DAVID A; *EXTENSIONS OF THE SOCIAL RELATIONS MODEL* (BNS-8210137); 12 MONTHS \$51,211
- YALE UNIVERSITY-PEABODY MUSEUM OF NATURAL HISTORY
- SIBLEY, CHARLES G; *THE PHYLOGENY OF THE PRIMATES AS INDICATED BY DNA-DNA HYBRIDIZATION* (BNS-8205774*); 12 MONTHS \$24,528
- YALE UNIVERSITY-SCHOOL OF MEDICINE
- LENTZ, THOMAS L; *NEUROMUSCULAR JUNCTION AND NEUROTROPIC MECHANISMS* (BNS-7912398 A02); 12 MONTHS \$60,398
- HAWROT, EDWARD; *BIOCHEMISTRY OF NERVE GROWTH FACTOR (NGF) BINDING AND INTERNALIZATION* (BNS-8118777); 24 MONTHS \$70,000
- DAVIS, MICHAEL; *NEURAL MODULATION OF THE STARTLE RESPONSE* (BNS-8120476); 12 MONTHS \$45,000
- LENTZ, THOMAS L; *IS THE ACETYLCHOLINE RECEPTOR ALSO THE RECEPTOR FOR RABIES VIRUS?* (BNS-8203825); 12 MONTHS \$70,001
- LENTZ, THOMAS L; *ELECTRON MICROSCOPE FOR STUDY OF NEURONAL RECEPTORS AND THEIR INTERACTIONS WITH VIRUSES* (BNS-8204442); 12 MONTHS \$100,000
- YALE UNIVERSITY
- PILBEAM, DAVID R. BEHRENSMEYER, ANNA K. AND BARRY, JOHN; *LATER MIOCENE HOMINIDS AND THE ORIGINS OF THE HOMINIDAE* (BNS-8007338 A02); \$5,000
- WAGNER, ALLAN R; *EPISODIC INFORMATION PROCESSING IN ASSOCIATIVE LEARNING* (BNS-8023399 A01); 12 MONTHS \$63,917
- STANKIEWICZ, EDWARD; *THE ACCENTUAL PATTERNS OF THE SLAVIC LANGUAGES* (BNS-8115588); 24 MONTHS \$24,000
- REMINGTON, CHARLES L. AND WHITEHEAD, PAUL F; *DOCTORAL DISSERTATION RESEARCH IN ANTHROPOLOGY* (BNS-8115742); 24 MONTHS \$9,702
- KACZMAREK, LEONARD K; *LONG LASTING NEURONAL DISCHARGE AND EXCITABILITY CHANGES* (BNS-8202364); 12 MONTHS \$70,000
- RATCLIFF, ROGER; *ORDER RELATIONS IN PERCEPTUAL MATCHING* (BNS-8203061); 15 MONTHS \$54,070
- CONKLIN, HAROLD C; *AN ETHNOGRAPHIC STUDY OF RESOURCE TECHNOLOGY* (BNS-8205455); 24 MONTHS \$74,956

DELAWARE

- UNIVERSITY OF DELAWARE
- IZARD, CARROLL E; *EMOTION EXPRESSIONS IN EARLY DEVELOPMENT* (BNS-8111832 A01); 24 MONTHS \$133,621

DISTRICT OF COLUMBIA

- AMERICAN PSYCHOLOGICAL ASSOCIATION
- PALLAK, MICHAEL S; *GROUP TRAVEL FOR U.S. PARTICIPANTS IN XX INTERNATIONAL CONGRESS OF APPLIED PSYCHOLOGY, EDINBURGH, SCOTLAND, JULY 25-31, 1982* (BNS-8200805); 12 MONTHS \$10,000
- AMERICAN UNIVERSITY
- SLOTNICK, BURTON M; *ANATOMICAL BASIS OF OLFACTORY DISCRIMINATION* (BNS-8004600 A01); 12 MONTHS \$47,934
- CARNEGIE INSTITUTION OF WASHINGTON
- ROTUNDO, RICHARD L; *NEURAL CONTROL OF ACETYLCHOLINESTERASE GENE EXPRESSION* (BNS-8015778 A02); 12 MONTHS \$69,000
- CENTER FOR APPLIED LINGUISTICS
- WOLFRAM, WALTER A. AND CHRISTIAN, DONNA; *VARIATION AND CHANGE IN GEOGRAPHICALLY ISOLATED COMMUNITIES* (BNS-8208916); 12 MONTHS \$39,959
- GEORGETOWN UNIVERSITY
- POPPER, ARTHUR N. AND MCCORMICK, CATHERINE A; *ULTRASTRUCTURE AND DEVELOPMENT OF THE EAR* (BNS-8008243 A01); 24 MONTHS \$99,998

- MCCORMICK, CATHERINE A; *CENTRAL PROJECTIONS OF THE OCTAVOLATERALIS SYSTEM* (BNS-8118843); 24 MONTHS \$73,671
- BRADFORD, MARK R; *ORGANIZATION OF VERTEBRATE FOREBRAIN: ACTINOPTERYGIANS* (BNS-8118844); 36 MONTHS \$117,000

HOWARD UNIVERSITY

- MASSARI, V JOHN; *COLLATERAL SPROUTING OF MONOAMINERGIC AND SUBSTANCE P NEURONS IN THE SPINAL CORD* (BNS-7923451 A02); 12 MONTHS \$46,000

LINGUISTIC SOCIETY OF AMERICA

- FROMKIN, VICTORIA A; *GROUP TRAVEL FOR US PARTICIPANTS IN THE X I I I INTERNATIONAL CONGRESS OF LINGUISTS, TOKYO, JAPAN, 29 AUGUST & SEPTEMBER 1983* (BNS-8118594); 9 MONTHS \$12,000

NATIONAL ACADEMY OF SCIENCES

- LAZEN, ALVIN G; *U.S. NATIONAL COMMITTEE FOR THE INTERNATIONAL BRAIN RESEARCH ORGANIZATION* (BNS-8023333 A01); 12 MONTHS \$18,260
- LAZEN, ALVIN G; *U.S. NATIONAL COMMITTEE FOR THE INTERNATIONAL BRAIN RESEARCH ORGANIZATION* (BNS-8023333 A02); 12 MONTHS \$18,500
- EWING, JUNE S; *GROUP TRAVEL FOR U.S. PARTICIPANTS IN THE FIRST WORLD CONGRESS OF THE INTERNATIONAL BRAIN RESEARCH ORGANIZATION, LAUSANNE, SWITZERLAND, APRIL 1-4, 1982* (BNS-8118596); 9 MONTHS \$15,000

SMITHSONIAN INSTITUTION

- DITTS, WOLFGANG P; *PRIMATE SOCIAL ORGANIZATION IN RELATION TO DEMOGRAPHY, GENEALOGY AND ENVIRONMENT* (BNS-7924057 A02); 12 MONTHS \$60,125
- SILLEN, ANDREW; *STRONTIUM AND DIET IN THE LEVANTINE EPI-PALEOLITHIC AND NEOLITHIC* (BNS-8111837 A01); 12 MONTHS \$41,232

FLORIDA

FLORIDA STATE UNIVERSITY

- GRAZIADEI, PASQUALE P; *NEUROGENESIS AND PLASTICITY IN THE OLFACTORY SYSTEM OF MAMMALS* (BNS-8006803 A01); 12 MONTHS \$76,000
- WILLIAMS, THEODORE P; *SINGLE VISUAL PHOTORECEPTORS* (BNS-8105731 A01); 12 MONTHS \$62,000
- STEPHAN, FRIEDRICH K; *MULTIOSCILLATOR CONTROL OF CIRCADIAN RHYTHMS* (BNS-8117258); 12 MONTHS \$42,000
- BERKLEY, MARK A; *NEURAL SUBSTRATES OF VISUAL PERCEPTION* (BNS-8118780); 24 MONTHS \$94,991
- HINTIKKA, JAAKKO; *RESEARCH IN GAME-THEORETICAL SEMANTICS* (BNS-8119033); 18 MONTHS \$29,999

UNIVERSITY OF FLORIDA-COLLEGE OF MEDICINE

- PHILLIPS, M IAN; *BRIAN NEURAL ACTIVITY AND ANGIOTENSIN ACTION* (BNS-8025363); 12 MONTHS \$50,000

UNIVERSITY OF FLORIDA

- TEAS, DONALD C; *SPECIFICATION OF AUDITORY NERVE RESPONSES TO BRIEF ACOUSTIC SIGNALS* (BNS-8021334 A01); 12 MONTHS \$46,310
- KIMBALL, SOLON T. AND SCHMIDT, DWIGHT L; *DOCTORAL DISSERTATION RESEARCH IN ANTHROPOLOGY* (BNS-8120744); 12 MONTHS \$6,103
- MILANICH, JERALD T; *ARCHAEOLOGY OF LITTLE SALT SPRING, FLORIDA* (BNS-8120786); 6 MONTHS \$17,450
- DEWSBURY, DONALD A; *DETERMINANTS OF REPRODUCTIVE SUCCESS IN MUROID RODENTS* (BNS-8200659); 12 MONTHS \$55,000
- BERNARD, H RUSSELL; *OTOMI MONOLINGUAL ETHNOGRAPHY* (BNS-8209643); 24 MONTHS \$20,002
- ANDERSON, PETER A; *THE PHYSIOLOGY OF SYMMETRICAL CHEMICAL SYNAPSES* (BNS-8209849); 12 MONTHS \$76,122

UNIVERSITY OF MIAMI-SCHOOL OF MEDICINE

- WILSON, DAVID L; *AXONAL TRANSPORT AND THE DESTINATION OF PROTEINS* (BNS-8117817); 12 MONTHS \$43,007

UNIVERSITY OF MIAMI

- WADDINGTON, KEITH D; *INFORMATION USED IN FORAGING* (BNS-8004537 A01); 12 MONTHS \$12,500
- CARVER, CHARLES S; *COOPERATIVE RESEARCH ON SELF-ATTENTION, EXPECTANCY, AND BEHAVIORAL REGULATION* (BNS-8107236 A01); 12 MONTHS \$33,688
- SCHNEIDERMAN, NEIL; *CNS MEDIATION OF BRADYCARDIA RESPONSES* (BNS-8108539 A01); 12 MONTHS \$48,000
- GREEN, STEVEN M. AND MERRITT, PETER G; *DOCTORAL DISSERTATION RESEARCH IN PSYCHOBIOLOGY* (BNS-8120220); 15 MONTHS \$6,870

GEORGIA

EMORY UNIVERSITY

- EDWARDS, DAVID A; *NEURAL CONTROL OF BEHAVIOR: THE VENTROMEDIAL HYPOTHALAMUS* (BNS-7912393 A02); 24 MONTHS \$21,178
- GORDON, THOMAS P; *ENDOCRINE CONTROL OF SEASONAL REPRODUCTION* (BNS-8113248 A01*); 12 MONTHS \$23,890
- BARLETT, PEGGY F; *ADAPTIVE STRATEGIES OF GEORGIA FARMERS* (BNS-8121459*); 18 MONTHS \$45,000

EMORY UNIVERSITY-SCHOOL OF MEDICINE

- SCOTT, JOHN W; *ANALYSIS OF THE OLFACTORY PROJECTIONS* (BNS-8102175 A01); 12 MONTHS \$63,192

EMORY UNIVERSITY-YERKES REGIONAL PRIMATE RESEARCH CENTER

NADLER, RONALD D. BLANK, MICHAEL S. AND COLLINS, DELWOOD C. *ENDOCRINE FUNCTION IN PRIMATES* (BNS-7923015 A02; 12 MONTHS \$56,000)

WALLEN, KIM; *PROCEPTIVITY: OVARIAN STEROID INFLUENCES* (BNS-8117627; 12 MONTHS \$48,498)

HAWAII
BERNICE P BISHOP MUSEUM

KIRCH, PATRICK V. AND MCCOY, PATRICK C. *RENOVATION OF THE PACIFIC ARCHAEOLOGICAL COLLECTION STORAGE* (BNS-8203670; 18 MONTHS \$32,014)

KIRCH, PATRICK V. *THE HISTORICAL TRANSFORMATION OF HAWAIIAN SOCIETY AND ECONOMY* (BNS-8205621; 18 MONTHS \$82,555)

CENTER FOR CULTURAL & TECH INTERCHG EAST & WEST

KUNSTADTER, PETER; *SOCIOECONOMIC, DEMOGRAPHIC AND ENVIRONMENTAL CHANGE IN NORTHERN THAILAND* (BNS-7914093 A02; 12 MONTHS \$32,460)

KUNSTADTER, PETER; *SOCIOECONOMIC, DEMOGRAPHIC AND ENVIRONMENTAL CHANGE IN NORTHERN THAILAND* (BNS-7914093 A03; \$3,500)

UNIVERSITY OF HAWAII-MANOA

BITTERMAN, M. E. *LEARNING IN AN INVERTEBRATE* (BNS-7905876 A01; 24 MONTHS \$50,000)

COOKE, IAN M. *NEURAL PATTERNING: MECHANISMS AND NEURO-HORMONAL ACTIONS* (BNS-8107289 A01; 12 MONTHS \$68,020)

GRIFFIN, P. BION, AND MOIR, BARBARA G. *DOCTORAL DISSERTATION RESEARCH IN ANTHROPOLOGY* (BNS-8200343; 12 MONTHS \$4,732)

SOLHEIM, WILHELM G. AND WHEELER, FLOYD E. *DOCTORAL DISSERTATION RESEARCH IN ANTHROPOLOGY* (BNS-8208831; 6 MONTHS \$7,447)

ILLINOIS
ILLINOIS STATE MUSEUM

KING, FRANCES B. *CONSERVATION AND CATALOGING OF A PREHISTORIC CULTIGEN COLLECTION* (BNS-8202990; 12 MONTHS \$15,777)

LOYOLA UNIVERSITY OF CHICAGO

DYE, RAYMOND H. *BINAURAL PROCESSING OF TEMPORAL SEQUENCES* (BNS-8119027; 12 MONTHS \$40,900)

NORTHWESTERN UNIVERSITY-CHICAGO CAMPUS-MEDICAL SCHOOL

GOLDMAN, ROBERT D. *THE NEURONAL CYTOSKELETON* (BNS-8023922 A01*; 12 MONTHS \$42,500)

NORTHWESTERN UNIVERSITY

SADE, DONALD S. *THE CAYO SANTIAGO PRIMATE FACILITY* (BNS-7714882 A04; 12 MONTHS \$100,222)

PENNINGTON, NANCY, AND HASTIE, REID; *COGNITIVE PROCESS IN JUROR DECISIONMAKING* (SES-8012002 A01*; 24 MONTHS \$47,459)

WIGHTMAN, FREDERICK L. *AUDITORY SPACE PERCEPTION* (BNS-8014144 A02; 12 MONTHS \$75,031)

GESTELAND, ROBERT C. *TRANSMISSION AND CODING OF OLFACTORY INFORMATION IN RECEPTORS* (BNS-8117075; 24 MONTHS \$100,583)

BLAKE, RANDOLPH; *HUMAN BINOCULAR VISION* (BNS-8200850; 12 MONTHS \$24,994)

SOUTHERN ILLINOIS UNIVERSITY - CARBONDALE

CORRUCCINI, ROBERT S. *OCCLUSAL EPIDEMIOLOGICAL TRANSITION IN POPULATIONS OF NORTH INDIA* (BNS-8119875; 24 MONTHS \$9,081)

UNIVERSITY OF CHICAGO

GROBSTEIN, PAUL; *DEVELOPMENT OF NEURONAL CONNECTIVITY DURING ANURAN METAMORPHOSIS* (BNS-7914122 A02; 12 MONTHS \$39,300)

SHEVELL, STEVEN K. *MECHANISMS OF ADAPTATION IN SUPRATHRESHOLD VISUAL PERCEPTION* (BNS-7924024 A02; 12 MONTHS \$39,969)

DIFFLOTH, GERARD F. *A SURVEY OF MON-KHMER LANGUAGES IN THE PEOPLE'S REPUBLIC OF CHINA* (BNS-7926808 A01; 6 MONTHS \$4,910)

WILSON, HUGH R. *THE SPATIOTEMPORAL BASIS OF GRATING PERCEPTION* (BNS-8113574; 12 MONTHS \$56,787)

MONSELL, STEPHEN; *CHRONOMETRIC STUDIES OF SPEECH PRODUCTION MECHANISMS* (BNS-8121372; 12 MONTHS \$54,008)

O'SHEA, MICHAEL R. *NEUROBIOLOGY OF PEPTIDERGIC NEURONS* (BNS-8202515; 12 MONTHS \$69,515)

FREEMAN, LESLIE G. *LOWER MAGDALENIAN ADAPTATIONS IN CANTABRIA SPAIN: EL JUYO CASE* (BNS-8205838; 24 MONTHS \$129,647)

PHILIPSON, MORRIS, AND BRENT, T. DAVID; *AN INTERPRETATION OF SINHALESE CULTURE AND RELIGION* (BNS-8210206; 12 MONTHS \$14,110)

NASH, MANNING, AND SKIBIAK, JOHN P. *DOCTORAL DISSERTATION RESEARCH IN ANTHROPOLOGY* (BNS-8210245; 24 MONTHS \$5,100)

BUTZER, KARL W. *ARCHAEOLOGICAL EXCAVATION IN EASTERN SPAIN* (BNS-8212329; 12 MONTHS \$25,747)

UNIVERSITY OF ILLINOIS AT URBANA

COLE, PETER; *THE SYNTAX OF ANCASH QUECHUA* (BNS-7904784 A01; 12 MONTHS \$10,068)

KOMORITA, SAMUEL S. *THE GENERALITY AND VALIDITY OF SOME THEORIES OF COALITION FORMATION* (BNS-7911103 A02; 12 MONTHS \$30,965)

GILLETTE, RHANOR; *CYCLIC AMP REGULATES NEURON PLASTICITY VIA CALCIUM* (BNS-7918329 A02; 12 MONTHS \$61,000)

MEDIN, DOUGLAS L. *MEMORY PROCESSES AND CONTEXTUAL INFORMATION* (BNS-7922678 A02; 12 MONTHS \$34,366)

ORTONY, ANDREW; *THE SIMILARITY/METAPHOR RELATION IN NATURAL LANGUAGE* (BNS-8004541 A02; 12 MONTHS \$52,613)

SATINOFF, EVELYN; *BEHAVIORAL AND PHYSIOLOGICAL THERMOREGULATION* (BNS-8022468 A01; 12 MONTHS \$61,288)

DAVIS, JAMES H. *GROUP AND INDIVIDUAL DECISION MAKING AND PROBLEM SOLVING* (BNS-8113474; 12 MONTHS \$50,000)

LATHRAP, DONALD W. AND ERICKSON, CLARK; *DOCTORAL DISSERTATION RESEARCH IN ANTHROPOLOGY* (BNS-8118773; 14 MONTHS \$5,000)

RILEY, THOMAS J. AND MOFFAT, CHARLES R. *DOCTORAL DISSERTATION RESEARCH IN ANTHROPOLOGY* (BNS-8119037; 6 MONTHS \$1,480)

ZUIDEMA, R. TOM, AND VAN DE GUCHTE, MAAARTEN J. *DOCTORAL DISSERTATION RESEARCH IN ANTHROPOLOGY* (BNS-8119649; 12 MONTHS \$5,968)

FENG, ALBERT S. *STRUCTURAL AND FUNCTIONAL ORGANIZATION OF FROG'S TORUS SEMICULARIS* (BNS-8204160; 12 MONTHS \$52,665)

ZUIDEMA, R. TOM; *ANALYSIS OF CONCENTRIC SYSTEMS OF SIGHT-LINES BY PRE-SPANISH CULTURES* (BNS-8205793; 12 MONTHS \$3,000)

PHILLIPS, JAMES L. *PREHISTORY OF WADI FEIRAN AND ITS TRIBUTARIES, SOUTHERN SINAI* (BNS-8206335; 12 MONTHS \$19,900)

CARTER-FORGES, C. SUE; *IPA MOBILITY ASSIGNMENT (C. SUE CARTER-FORGES)* (BNS-8216470; 12 MONTHS \$40,034)

INDIANA
INDIANA UNIVERSITY, BLOOMINGTON

NEFF, WILLIAM D. *SENSORY DISCRIMINATION* (BNS-8005728 A02; 12 MONTHS \$40,000)

ASLIN, RICHARD N. *DEVELOPMENT OF THE VISUAL SYSTEM IN HUMAN INFANTS* (BNS-8013075 A02; 12 MONTHS \$43,830)

GUTH, SHERMAN L. *STUDIES OF HUMAN COLOR VISION* (BNS-8022491 A01; 12 MONTHS \$52,050)

WIGHTMAN, R. MARK; *ELECTROANALYTICAL METHODS IN NEUROCHEMISTRY* (BNS-8100044 A01; 12 MONTHS \$52,200)

JAMISON, PAUL L. AND FRY, DOUGLAS P. *DOCTORAL DISSERTATION RESEARCH IN ANTHROPOLOGY* (BNS-8117478; 24 MONTHS \$3,420)

MIROLLI, MAURIZIO; *INWARD AND OUTWARD CURRENTS IN A NON-SPIKING MEMBRANE* (BNS-8201585; 24 MONTHS \$75,235)

TIMBERLAKE, WILLIAM D. *TOWARD A THEORY OF APPETITIVE BEHAVIOR: BEHAVIOR SYSTEMS AND LEARNING* (BNS-8210139; 24 MONTHS \$87,000)

SUTHERS, RODERICK A. AND HECTOR, DWIGHT H. *PHYSIOLOGY AND ACOUSTICS OF AVIAN SONAR SIGNALS* (BNS-8210256; 12 MONTHS \$55,581)

INDIANA UNIV-PURDUE UNIV AT INDIANAPOLIS

HAFNER, GARY S. *CELLULAR PROCESSES INVOLVED IN THE RENEWAL OF PHOTOPIGMENT CONTAINING MEMBRANE IN AN INVERTEBRATE PHOTORECEPTOR* (BNS-8004587 A02; 12 MONTHS \$43,908)

INDIANA UNIV-PURDUE UNIV AT INDIANAPOLIS-SCHOOL OF MEDICINE

OCHS, SIDNEY; *AXOPLASMIC TRANSPORT: THE ROLE OF CALCIUM AND PROPERTIES OF THE TRANSPORT MECHANISM* (BNS-7914029 A02; 12 MONTHS \$56,439)

PURDUE UNIVERSITY

TOWNSEND, JAMES T. *MATHEMATICAL AND EMPIRICAL RESEARCH IN HUMAN INFORMATION PROCESSING* (BNS-7920298 A02; 12 MONTHS \$36,070)

BAYER, SHIRLEY A. *ONTOGENY OF THE LIMBIC AND OLFACTORY SYSTEMS* (BNS-7921303 A02; 12 MONTHS \$42,788)

CAPALDI, EGIDIO J. *SERIAL PATTERN LEARNING* (BNS-8001171 A02; 12 MONTHS \$46,833)

PAK, WILLIAM L. AND MATSUMOTO, HIROYUKI; *EXCITATION MECHANISM IN THE PHOTORECEPTOR* (BNS-8015599 A01; 12 MONTHS \$41,932)

PAK, WILLIAM L. AND MATSUMOTO, HIROYUKI; *EXCITATION MECHANISM IN THE PHOTORECEPTORS* (BNS-8015599 A02; 12 MONTHS \$46,266)

TUBIS, ARNOLD; *COCHLEAR DYNAMICS* (BNS-8021529 A01; 12 MONTHS \$18,500)

EAGLY, ALICE H. *GENDER DIFFERENCES IN INFLUENCEABILITY* (BNS-8023311 A02; 12 MONTHS \$35,610)

NAKAJIMA, YASUKO, AND NAKAJIMA, SHIGEHIO; *FUNCTIONAL MEMBRANE STRUCTURE OF SYNAPSES* (BNS-8106673 A01; 12 MONTHS \$50,000)

ALTMAN, JOSEPH; *RESEARCH PROGRAM IN DEVELOPMENTAL NEUROBIOLOGY* (BNS-8111343; 12 MONTHS \$84,561)

SORKIN, ROBERT D. *AUDITORY SIGNAL PROCESSING* (BNS-8118906; 24 MONTHS \$46,396)

IOWA
IOWA STATE UNIVERSITY OF SCIENCE & TECHNOLOGY

BLAUSTEIN, JEFFREY D. *NEUROENDOCRINE REGULATION OF BEHAVIOR* (BNS-8013050 A02; 1 MONTHS \$1,805)

UNIVERSITY OF IOWA

GORMEZANO, ISIDORE; *CLASSICAL DEFENSE AND REWARD CONDITIONING* (BNS-8005907 A02; 12 MONTHS \$44,073)

KANSAS
KANSAS STATE UNIVERSITY

KELLY, PAUL T. *LOCALIZATION AND SELF-ASSEMBLY OF THE MAJOR PSD PROTEIN* (BNS-8106259; 12 MONTHS \$55,000)

UNIVERSITY OF KANSAS MAIN CAMPUS

FRAYER, DAVID W. AND CALCAGNO, JAMES M.; DOCTORAL DISSERTATION RESEARCH IN ANTHROPOLOGY (BNS-8114920); 6 MONTHS \$4,350

MICHENER, CHARLES D.; BEHAVIORAL STUDIES OF BEES AND WASPS (BNS-8200651); 12 MONTHS \$44,000

SIMMONS, ALAN H.; ARCHAEOLOGICAL EXCAVATION OF CHACO CANYON, NEW MEXICO ROCK SHELTER (BNS-8203881); 12 MONTHS \$40,396

BELL, WILLIAM J.; COURSE CONTROL IN ANIMAL ORIENTATION (BNS-8203986); 12 MONTHS \$56,000

MICHENER, CHARLES D. AND CAMERON, SYDNEY A.; DOCTORAL DISSERTATION RESEARCH IN PSYCHOBIOLOGY (BNS-8205568); 24 MONTHS \$4,687

LUNDSDGAARDE, HENRY P.; GILBERTESE LAND TENURE (BNS-8209740); 12 MONTHS \$15,116

WICHITA STATE UNIVERSITY

GUNDERSEN, JAMES N.; PROVENANCE ANALYSES OF PLAINS PIPES-TONES: KANSAS AND MINNESOTA (BNS-8210197); 12 MONTHS \$18,871

KENTUCKY

UNIVERSITY OF KENTUCKY

DICKINSON, PATSY S.; NEURAL CONTROL AND MODULATION OF WATER REGULATORY BEHAVIOR (BNS-8119270); 36 MONTHS \$75,000

DILLEHAY, RONALD C. AND NIETZEL, MICHAEL T.; THE INFLUENCE OF JUROR EXPERIENCE ON JURY DECISIONMAKING (SES-8209479*); 24 MONTHS \$22,488

LOUISIANA

LOUISIANA STATE UNIVERSITY, BATON ROUGE

ARMSTRONG, ESTE; CONSIDERATION OF THE PRIMATE LIMBIC SYSTEM (BNS-8204480); 24 MONTHS \$51,045

TULANE UNIVERSITY

HEALAN, DAN M.; ANALYSIS OF AN OBSIDIAN WORKSHOP (BNS-7924754 A02); \$2,542

MAINE

UNIVERSITY OF MAINE, ORONO

MCCLEAVE, JAMES D.; ORIENTATION BEHAVIOR IN FISHES USING SELECTIVE TIDAL STREAM TRANSPORT (BNS-8122116); 12 MONTHS \$42,645

BONNICHSEN, ROBSON, AND BORNS, HAROLD W.; MUNSGUN LAKES ARCHAEOLOGICAL RESEARCH PROJECT (BNS-8205249); 18 MONTHS \$61,000

MARYLAND

JOHN F. KENNEDY INST FOR HANDICAPPED CHILDREN

SINGH, INDERJIT; NEW ENZYME FOR CERAMIDE SYNTHESIS AND ITS ROLE IN MYELINATION (BNS-7923017 A02); 12 MONTHS \$56,000

KISHIMOTO, YASUO; ALKYLGLACOLIPIDS AND MYELINATION (BNS-8022444 A01); 12 MONTHS \$61,002

JOHNS HOPKINS UNIVERSITY

SELIGER, HOWARD H. AND LALL, ABNER B.; SELECTION FACTORS FOR SPECTRAL CHARACTERISTICS OF VISION AND FOR THE COLORS OF BIOLUMINESCENCE (BNS-8012215 A01); 12 MONTHS \$52,034

HULSE, STEWART H.; SERIAL PATTERN LEARNING (BNS-8014137 A02); 12 MONTHS \$40,000

SHIPMAN, PATTY L.; A SCANNING ELECTRON MICROSCOPE STUDY OF THE EFFECTS OF TAPHONOMIC EVENTS (BNS-8021397 A01); 24 MONTHS \$86,158

HARTIG, PAUL R.; BIOCHEMISTRY OF SEROTONIN AND DOPAMINE RECEPTORS (BNS-8108080 A01); 12 MONTHS \$48,000

AHERN, EMILY M. AND INGERSON, ALICE E.; DOCTORAL DISSERTATION RESEARCH IN ANTHROPOLOGY (BNS-8112850); 6 MONTHS \$3,460

MCCLOSKEY, MICHAEL, AND EGETH, HOWARD; THE EXPERIMENTAL PSYCHOLOGIST IN COURT: THE ETHICS OF EXPERT TESTIMONY (BNS-8209940*); 18 MONTHS \$2,000

JOHNS HOPKINS UNIVERSITY-SCHOOL OF HYGIENE & PUBLIC HEALTH

WARTZOK, DOUGLAS, AND KETTEN, DARLENE R.; DOCTORAL DISSERTATION RESEARCH IN SENSORY PHYSIOLOGY AND PERCEPTION (BNS-8118072); 18 MONTHS \$6,944

JOHNS HOPKINS UNIVERSITY-SCHOOL OF MEDICINE

GOLDSTEIN, MOISE H.; A NEUROPHYSIOLOGICAL STUDY OF SOUND LOCALIZATION (BNS-7924519 A02); 12 MONTHS \$80,252

UNIVERSITY OF MARYLAND BALTIMORE PROF SCHOOLS

BURT, DAVID R.; TRH IN RETINA (BNS-8025469 A01); 12 MONTHS \$48,721

WEINREICH, DANIEL; ROLE OF HISTAMINE AS A NEUROTRANSMITTER IN THE CENTRAL NERVOUS SYSTEM (BNS-8113552); 12 MONTHS \$80,000

YAROWSKY, PAUL J.; 2-DEOXYGLUCOSE UPTAKE IN SINGLE AUTONOMIC NEURONS (BNS-8119481); 12 MONTHS \$36,000

ELDEFRAWI, MOHYEE E.; IONIC CHANNELS OF MALAPTERUS ELETROPLAX (BNS-8307798); 12 MONTHS \$24,998

UNIVERSITY OF MARYLAND, BALTIMORE COUNTY

HANSON, FRANK E.; PHYSIOLOGICAL AND CHEMICAL BASIS OF HOST-PLANT RECOGNITION BY INSECTS (BNS-7914043 A02); 12 MONTHS \$41,173

CATANIA, A. CHARLES; FREE-CHOICE VERSUS FORCED-CHOICE PREFERENCES (BNS-8203885); 24 MONTHS \$70,000

UNIVERSITY OF MARYLAND, COLLEGE PARK

STEINMAN, ROBERT M.; HUMAN OCULOMOTOR CAPACITY (BNS-8013508 A01); 12 MONTHS \$49,229

BORGIA, GERALD; THE FUNCTIONS OF DISPLAY (BNS-8113477 A01*); 12 MONTHS \$5,000

MASSACHUSETTS

BOSTON UNIVERSITY

WHITE, EDWARD L.; SYNAPTIC CONNECTIVITY IN THE CEREBRAL CORTEX (BNS-8202614); 12 MONTHS \$59,997

ATEMA, JELLE; PHYSIOLOGICAL CHARACTERIZATION OF PRIMARY TASTE NEURONS (BNS-8210434); 18 MONTHS \$100,000

BOSTON UNIVERSITY-SCHOOL OF MEDICINE

ROSENE, DOUGLAS L.; ANATOMY OF THE LIMBIC SYSTEM IN PRIMATES (BNS-7924099 A02); 12 MONTHS \$65,000

BRANDEIS UNIVERSITY

LISMAN, JOHN; MECHANISM OF MODULATION OF K CHANNELS BY LIGHT (BNS-8105746 A01); 12 MONTHS \$49,688

KOSSLYN, STEPHEN M.; VISUAL IMAGES AS MEMORY STRUCTURES (BNS-8240259); 12 MONTHS \$49,852

KOSSLYN, STEPHEN M.; VISUAL IMAGES AS MEMORY STRUCTURES (BNS-8240259 A01); 12 MONTHS \$54,874

CHILDREN'S HOSPITAL CORPORATION

HENRY, EARL W. AND SIDMAN, RICHARD; BLOCK IN TREMBLER MUTANT SCHWANN CELL DIFFERENTIATION (BNS-8206523); 12 MONTHS \$30,000

DANA-FARBER CANCER INSTITUTE

WAGNER, JOHN A.; BIOCHEMISTRY OF MEMBRANE FUSION IN A PHEOCHROMACYTOMA CELL LINE (BNS-8005752 A02); 12 MONTHS \$60,000

DOCUMENTARY EDUCATIONAL RESOURCES

ASCH, TIMOTHY, AND LEWIS, DOUGLAS; DEVELOPMENT OF AN ETHNOGRAPHIC METHOD FOR THE STUDY OF LARGE SCALE RITUALS (BNS-8207569); 12 MONTHS \$8,000

HAMPSHIRE COLLEGE

ROSENBAUM, DAVID A.; COGNITIVE CONTROL OF RAPID MOVEMENT SEQUENCES (BNS-8120104); 24 MONTHS \$39,876

HARVARD UNIVERSITY-HARVARD MEDICAL SCHOOL

BRIDGES, ROBERT S.; ENDOCRINE AND NEURAL REGULATION OF MATERNAL BEHAVIOR (BNS-8014670 A02*); 12 MONTHS \$25,164

HARVARD UNIVERSITY

WINNER, ELLEN, AND GARDNER, HOWARD; THE DEVELOPMENT OF METAPHORIC OPERATIONS (BNS-7924450 A02); 12 MONTHS \$69,000

DEVORE, IRVEN; DEMOGRAPHY AND ECOLOGY OF TWO FOREST POPULATIONS (BNS-7926640 A02); 12 MONTHS \$75,115

HOLDOBLER, BERTHOLD K.; BEHAVIORAL MECHANISMS OF FORAGING AND TERRITORIAL CONTROL (BNS-8002613 A02); 12 MONTHS \$55,007

GREEN, DAVID M.; QUANTITATIVE MODELS IN PSYCHOPHYSICS (BNS-8021142 A01); 12 MONTHS \$67,770

FRANK, ERIC; PLASTICITY OF SENSORY-MOTOR SYNAPSES (BNS-8021605 A01); 12 MONTHS \$22,772

DEVORE, IRVEN B. AND ELLISON, PETER T.; DOCTORAL DISSERTATION RESEARCH IN ANTHROPOLOGY (BNS-8115367); 12 MONTHS \$2,250

HEATH, JEFFREY G.; PHONETIC AND PHONOLOGICAL ANALYSIS OF MOROCCAN ARABIC (BNS-8118779); 12 MONTHS \$9,378

DWECK, CAROL S. AND NICHOLLS, JOHN G.; THE DEVELOPMENT OF ACHIEVEMENT MOTIVATION: A COGNITIVE THEORY (BNS-8120628 A01); 12 MONTHS \$55,041

DEMAREST, ARTHUR A. AND SHARER, ROBERT J.; THE EL MIRADOR CERAMIC RESEARCH PROJECT (BNS-8121065); 12 MONTHS \$28,748

CALABRESE, RONALD L.; CENTRAL PATTERN GENERATION IN A SIMPLE NERVOUS SYSTEM (BNS-8121551); 24 MONTHS \$75,000

PILBEAM, DAVID R.; ORIGINS OF HOMINIDAE (BNS-8140818 A01*); \$4,444

PILBEAM, DAVID R.; LATER MIOCENE HOMINIDS AND THE ORIGINS OF HOMINIDAE (BNS-8140818 A02); 12 MONTHS \$121,797

YOKOYAMA, OLGA T.; FACTORS GOVERNING ORDER OF ELEMENTS IN RUSSIAN SYNTAX (BNS-8206064); 18 MONTHS \$14,415

BROWN, ROGER W.; PSYCHOLOGICAL CAUSALITY IMPLICIT IN LANGUAGE (BNS-8209378); 24 MONTHS \$54,913

PILBEAM, DAVID R. AND BADGLEY, CATHERINE; PAKISTAN AND CHINESE MIOCENE HOMINIDS AND THEIR ECOLOGICAL CONTEXTS (BNS-8212224); 12 MONTHS \$20,882

HARVARD UNIVERSITY-PEABODY MUSEUM

LAMBERG-KARLOVS, CLIFFORD; PRESERVATION STORAGE FOR THE OCEANIC COLLECTIONS (BNS-8204479); 24 MONTHS \$109,499

LAMBERG-KARLOVS, CLIFFORD; PRESERVATION OF THE NORTH AMERICAN INDIAN BASKETRY COLLECTION (BNS-8206316); 12 MONTHS \$76,537

WELLS, PETER S.; PUBLICATION COSTS OF RURAL ECONOMY IN THE EARLY IRON AGE: EXCAVATIONS AT HASCHERKELLER 1978 - 1981 (BNS-8209930); 12 MONTHS \$13,081

MARINE BIOLOGICAL LABORATORY

GROSS, PAUL R.; IMPROVING MARINE RESOURCES FACILITIES AT THE MBL (DEB-8209469*); 24 MONTHS \$40,063

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

NAUTA, WALLE J.; A NEUROANATOMICAL ANALYSIS OF THE MESENCEPHALO-LIMBIC CONNECTION (BNS-8007905 A02); 12 MONTHS \$54,202

BRESNAN, JOAN W; GRAMMATICAL REPRESENTATION AND GRAMMATICAL PROCESSING (BNS-8014730 A02; 12 MONTHS \$141,996
 POTTER, MARY C; COMPREHENSION OF WRITTEN AND PICTURED INFORMATION (BNS-8015597 A01; 12 MONTHS \$72,827
 SCHILLER, PETER H; PARALLEL CHANNELS OF INFORMATION PROCESSING IN THE VISUAL SYSTEMS (BNS-8019714 A01; 12 MONTHS \$41,000
 GRAYBIEL, ANN M; COMPARTMENTAL NATURE OF THE CONNECTIONS AND HISTOCHEMISTRY OF THE SUPERIOR COLLICULUS AND CEREBELLAR CORTEX (BNS-8112125 A01; 12 MONTHS \$90,426
 PINKER, STEVEN; MENTAL REPRESENTATION OF 3-D SPACE (BNS-8216546; 5 MONTHS \$17,000

MASSACHUSETTS MENTAL HEALTH RESEARCH CORP

MCCARLEY, ROBERT W; THE SYNAPTIC BASIS OF SLEEP CYCLE CONTROL (BNS-8115786 A01; 12 MONTHS \$59,985

PEABODY MUSEUM OF SALEM

FETCHKO, PETER J; INVENTORY, CARE AND PRESERVATION OF THE PACIFIC COLLECTION (BNS-8005461 A02; 12 MONTHS \$16,966

RETINA FOUNDATION

HARTLINE, PETER H. AND NEWMAN, ERIC A; MULTIMODAL INTEGRATION IN THE OPTIC TECTUM (BNS-8015839 A02; 12 MONTHS \$72,000

ROBERT S. PEABODY FOUNDATION OF ARCHAEOLOGY

MAC NEISH, RICHARD S. AND WILKERSON, S. JEFFREY K; THE DAWN OF MAYA CIVILIZATION IN BELIZE (BNS-8025477 A01; 12 MONTHS \$71,712

TUFTS UNIVERSITY-SCHOOL OF MEDICINE

MAUTNER, HENRY G; STUDIES OF CHOLINE ACETYLTRANSFERASE AND CARBOTINIC ACETYLTRANSFERASE (PCM-8203012*; 12 MONTHS \$20,000

UNIVERSITY OF MASSACHUSETTS MEDICAL SCHOOL

SCHAEFFER, SUSAN F; ULTRASTRUCTURAL ANALYSES OF NEUROTRANSMISSION (BNS-8118495; 24 MONTHS \$100,000

CARDASIS, CONSTANCE A; AGING NEUROMUSCULAR SYNAPSES - ULTRASTRUCTURAL REMODELING (BNS-8207829; 12 MONTHS \$60,000

UNIVERSITY OF MASSACHUSETTS, AMHERST

DAEHLER, MARVIN W. ANDERSON, DANIEL R. AND MYERS, NANCY; CHILD STUDY CENTER FACILITY (BNS-7822970 A03*; 12 MONTHS \$14,430

RAYNER, KEITH, AND FRAZIER, LYN; LANGUAGE PROCESSING DURING READING (BNS-7917600 A02; 12 MONTHS \$32,277

RAYNER, KEITH, AND FRAZIER, LYN; LANGUAGE PROCESSING DURING READING (BNS-7917600 A03; \$1,758

ANDERSON, DANIEL R; CHILDREN'S TELEVISION VIEWING BEHAVIOR (BNS-7924658 A02; 12 MONTHS \$58,146

MYERS, JEROME L; MEMORY STRUCTURES AND PROCESSES (BNS-8001181 A02; 12 MONTHS \$33,637

ANDERSON, DANIEL R. AND SMITH, ROBIN N; DOCTORAL DISSERTATION RESEARCH IN SOCIAL AND DEVELOPMENTAL PSYCHOLOGY (BNS-8116876; 12 MONTHS \$5,000

MEYER, JERROLD S; STEROID HORMONES AND GLIAL CELL FUNCTION (BNS-8118073; 24 MONTHS \$110,000

MERVIS, CAROLYN B; MOTHER-CHILD INTERACTION AND EARLY LEXICAL DEVELOPMENT (BNS-8121169; 24 MONTHS \$41,262

KROODSMA, DONALD E; THE BIOLOGICAL SIGNIFICANCE OF AVIAN VOCAL LEARNING (BNS-8201085*; 12 MONTHS \$37,682

HALPERN, JOEL M; A DIACHRONIC ANALYSIS OF KINSHIP PROCESS AND DEMOGRAPHIC CHANGE (BNS-8205831; 24 MONTHS \$36,000

FITE, KATHERINE V; NEUROBIOLOGICAL STUDIES OF VISUOMOTOR BEHAVIOR (BNS-8209026; 36 MONTHS \$110,925

UNIVERSITY OF MASSACHUSETTS, BOSTON

MOORE, CELIA L; HORMONES AND EXPERIENCE IN GENDER DIFFERENTIATION (BNS-8014669 A02; 12 MONTHS \$53,586

WORCESTER FOUNDATION FOR EXPERIMENTAL BIOLOGY

O'CONNELL, ROBERT J; PHEROMONE RECEPTOR NEURONS (BNS-8015395 A01; 12 MONTHS \$49,907

O'CONNELL, ROBERT J; CHEMICAL MODIFICATION AND MOLECULAR PROBE STUDIES OF INSECT PHEROMONE RECEPTOR NEURONS (BNS-8016395 A02; 12 MONTHS \$55,389

MORGANE, PETER J; NEOCORTICAL FORMATIONS OF THE DOLPHIN BRAIN (BNS-8100064 A01; 12 MONTHS \$48,896

TREISTMAN, STEVEN N; MODULATION OF NEURONAL PACEMAKER ACTIVITY (BNS-8108249 A01; 12 MONTHS \$52,000

MACRIDES, FOTIOS; OLFACTORY UNIT RESPONSES (BNS-8118767; 12 MONTHS \$70,000

MICHIGAN

ANDREWS UNIVERSITY

STOUT, JOHN F; NEURAL AND BEHAVIORAL ASPECTS OF CALL RECOGNITION AND RESPONSE (BNS-8113108*; 24 MONTHS \$52,431

MICHIGAN STATE UNIVERSITY

SPIELBERG, JOSEPH, AND BLETZER, KEITH V; DOCTORAL DISSERTATION RESEARCH IN ANTHROPOLOGY (BNS-8111637; 18 MONTHS \$4,831

KEMPTON, WILLETT, AND KEITH, JOANNE G; THE GENESIS AND USE OF FOLK THEORY IN EVERYDAY TASKS (BNS-8210088; 24 MONTHS \$80,241

MOONNELL, DAVID G; RETINAL ROD CYCLIC GMP PHOSPHODIESTERASE (BNS-8210414; 24 MONTHS \$100,000

OAKLAND UNIVERSITY

GAMBOA, GEORGE J; RESEARCH IN BEHAVIORAL DEVELOPMENT (BNS-8115592; 24 MONTHS \$50,000

UNIVERSITY OF MICHIGAN-ANN ARBOR-MEDICAL SCHOOL

WATSON, STANLEY J; ANATOMICAL AND PHYSIOLOGICAL STUDIES OF BRAIN ALPHA-MSH (BNS-8004512 A02; 12 MONTHS \$76,000

UNIVERSITY OF MICHIGAN-ANN ARBOR

JONIDES, JOHN; ORGANIZATION IN MEMORY (BNS-7913757 A03; 12 MONTHS \$48,000

NISBETT, RICHARD E; DOMAIN SPECIFICITY OF INFERENTIAL RULES (BNS-7914094 A02; 12 MONTHS \$63,830

BURNSTEIN, EUGENE; THE INFORMATIONAL BASIS OF SOCIAL INFLUENCE (BNS-7915416 A02; 12 MONTHS \$59,308

FRISANCHO, A. R; ADOLESCENT PREGNANCY AND BIRTH WEIGHT OF OFFSPRING (BNS-7924735 A02; 12 MONTHS \$33,839

MISTRETTE, CHARLOTTE M. AND BRADLEY, ROBERT M; DEVELOPMENT OF TASTE FUNCTION (BNS-8015737 A02; 12 MONTHS \$73,923

GINGERICH, PHILIP D; VARIABILITY AND HISTORY OF PRIMATES: EOCENE-MIOCENE ADAPIDAE (BNS-8016742 A01; 24 MONTHS \$50,000

ECKERT, PENELOPE; THE SPREAD OF LINGUISTIC CHANGE IN THE DETROIT SUBURBAN AREA (BNS-8023291 A01; \$47,951

PAYNE, ROBERT B; CULTURAL EVOLUTION OF LOCAL BEHAVIOR TRADITIONS (BNS-8102404 A01*; 12 MONTHS \$17,669

ORTNER, SHERRY B. AND PARKER, BARBARA; DOCTORAL DISSERTATION RESEARCH IN ANTHROPOLOGY (BNS-8108885; 18 MONTHS \$5,315

ORTNER, SHERRY B. AND SHEPARD, JOYCE W; DOCTORAL DISSERTATION RESEARCH IN ANTHROPOLOGY (BNS-8110973; 12 MONTHS \$5,488

ZAJONC, ROBERT B; AFFECT AND COGNITION: THE HARD INTERFACE (BNS-8117977; 12 MONTHS \$62,657

STEBBINS, WILLIAM C. AND MOODY, DAVID B; CHARACTERISTICS OF HEARING AND ITS EVOLUTION IN VERTEBRATES (BNS-8118027; 12 MONTHS \$62,718

MACDONALD, ROBERT L; NEUROPEPTIDE ACTIONS ON MAMMALIAN NEURONS IN CELL CULTURE (BNS-8118762; 12 MONTHS \$40,000

YOUNG, ANNE B. AND PENNEY, JOHN B; AMINO ACID NEUROTRANSMITTERS IN MOTOR FUNCTION (BNS-8118765; 12 MONTHS \$50,000

WOLPOFF, MILFORD H. AND RUSSELL, MARY D; DOCTORAL DISSERTATION RESEARCH IN ANTHROPOLOGY (BNS-8120078; 12 MONTHS \$8,587

COOMBS, CLYDE H; PREFERENCE AND RISK (BNS-8120299; 18 MONTHS \$89,325

JOHNS, PAMELA R; COLLABORATIVE RESEARCH: MODIFIABILITY OF PHOTORECEPTORS AND VISUAL SENSITIVITY (BNS-8203268; 12 MONTHS \$29,253

SCHORGER, WILLIAM D. AND EDWARDS, DAVID B; DOCTORAL DISSERTATION RESEARCH IN ANTHROPOLOGY (BNS-8206246*; 18 MONTHS \$3,040

MEYER, DAVID E; COGNITIVE PROCESSES IN PRODUCING BASIC UNITS OF SPEECH (BNS-8206809; 12 MONTHS \$60,000

UEDA, TETSUFUMI; A NOVEL ADENYLATE CYCLASE ACTIVATOR AND SYNAPTIC PROTEIN I (BNS-8207999; 12 MONTHS \$75,000

FORD, RICHARD I. AND JACKSON, H. EDWIN; DOCTORAL DISSERTATION RESEARCH IN ANTHROPOLOGY (BNS-8209649; 12 MONTHS \$5,438

WAYNE STATE UNIVERSITY-SCHOOL OF MEDICINE

HAZLETT, JAMES C; ONTOGENY AND PLASTICITY OF ASCENDING THALAMIC AFFERENTS IN THE OPOSSUM (BNS-8022312 A01; 12 MONTHS \$54,000

WAYNE STATE UNIVERSITY

GOODMAN, MORRIS; BIOMOLECULAR SYSTEMATICS OF PRIMATES AND OTHER EUTHERIA (BSR-7810717 A03*; 12 MONTHS \$34,000

WEISS, MARK L; RECONSTRUCTION OF PRIMATE RELATIONSHIPS (BNS-8203777*; 12 MONTHS \$19,540

MINNESOTA

UNIVERSITY OF MINNESOTA

COULTER, H. DAVID; NEUROPEPTIDE IMMUNOCYTOCHEMISTRY OF FROZEN DRIED NERVOUS TISSUE (BNS-8021004 A01; 12 MONTHS \$38,000

SOECHTING, JOHN F; ORGANIZATION AND CONTROL OF ARM MOVEMENTS (BNS-8117625; 24 MONTHS \$82,000

POPPEL, RICHARD E; BASIC MECHANISMS IN MOTOR CONTROL: MUSCLE AND MUSCLE SPINDLES (BNS-8119521; 36 MONTHS \$113,000

SNYDER, MARK; AN ANALYSIS OF THE SELF-MONITORING SCALE (BNS-8207632; 12 MONTHS \$25,000

UNIVERSITY OF MINNESOTA AT SAINT PAUL

BEITZ, ALVIN J; MIDBRAIN PAG: ITS RELATIONSHIP TO NOCICEPTION AND ANALGESIA (BNS-8214873; 12 MONTHS \$49,876

MISSISSIPPI

UNIVERSITY OF MISSISSIPPI

MATTHEWS, JOHN C; PURIFICATION OF THE SODIUM CHANNEL BY A NOVEL APPROACH EMPLOYING MEMBRANE FUSION (BNS-8203190; 24 MONTHS \$58,001

UNIVERSITY OF MISSISSIPPI-UNIVERSITY OF MISSISSIPPI MEDICAL CENTER

NOWAKOWSKI, RICHARD S; CONTROL OF CELL MIGRATION IN THE DEVELOPING HIPPOCAMPUS (BNS-8120050; 12 MONTHS \$40,000

MISSOURI

ST LOUIS UNIVERSITY-SCHOOL OF MEDICINE

COSCIA, CARMINE J. AND LASKOWSKI, MICHAEL B; SUBCELLULAR LOCALIZATION OF OPIATE RECEPTORS (BNS-8114947; \$55,000

UNIVERSITY OF MISSOURI, COLUMBIA

- JEN, PHILIP S; PROCESSING OF ACOUSTIC SIGNALS BY CEREBELLAR NEURONS IN FM AND CF-FM BATS (BNS-8007348 A02); 12 MONTHS \$60,013
 GERHARDT, H CARL; BASIC MECHANISMS OF ACOUSTIC COMMUNICATION (BNS-8103592 A01); 12 MONTHS \$44,578
 THELEN, ESTHER; SPONTANEOUS MOTOR PATTERNS IN HUMAN INFANTS (BNS-8200434); 12 MONTHS \$30,115
 VOM SAAL, FREDERICK S; BEHAVIORAL AND PHYSIOLOGICAL EFFECTS OF PRENATAL ENVIRONMENT (BNS-8303714*); 12 MONTHS \$8,047
 ROWLETT, RALPH M. AND BODNER, CONNIE C; DOCTORAL DISSERTATION IN ANTHROPOLOGY (BNS-8204098); 12 MONTHS \$9,775

WASHINGTON UNIVERSITY-SCHOOL OF MEDICINE

- SANES, JOSHUA R; THE SYNAPTIC CLEFT OF THE NEUROMUSCULAR JUNCTION (BNS-7923798 A02); 12 MONTHS \$54,085
 MARCUS, DANIEL C; COCHLEAR ION TRANSPORT (BNS-8115741); 12 MONTHS \$34,903
 THALMANN, RUEDIGER; PROTEINS OF THE INNER EAR (BNS-8118772); 12 MONTHS \$74,945

WASHINGTON UNIVERSITY

- STEIN, PAUL S; GROUP TRAVEL FOR U.S. PARTICIPANTS IN AN INTERNATIONAL SYMPOSIUM ON NEURAL ORIGIN OF RHYTHMIC MOVEMENTS, BRIGHTON, ENGLAND - SEPTEMBER 21-23, 1982 (BNS-8118273); 12 MONTHS \$5,000

NEBRASKA

FATHER FLANAGAN'S BOYS HOME

- WEBER, DANIEL L. AND JESTEADT, WALT; PSYCHOPHYSICAL STUDIES OF SUPPRESSION AND FORWARD MASKING (BNS-8207992); 12 MONTHS \$42,999
 WARR, WILLIAM B; ASCENDING AND DESCENDING CONNECTIONS OF THE LOWER AUDITORY SYSTEM (BNS-8208987); 12 MONTHS \$5,000
 MORLEY, BARBARA J. AND JAVEL, ERIC; SOMATOSTATIN IN THE AUDITORY SYSTEM (BNS-8210079); 24 MONTHS \$89,998

UNIVERSITY OF NEBRASKA MEDICAL CENTER AT OMAHA

- MURRIN, LEONARD C; DEVELOPMENT OF THE MAMMALIAN CENTRAL NERVOUS SYSTEM (BNS-7921105 A02); 12 MONTHS \$47,100

NEVADA

DESERT RESEARCH INSTITUTE

- IRWIN-WILLIAMS, CYNTHIA; HUNTER-GATHERER CULTURE CHANGE IN THE SOUTHWEST (BNS-8205746); 12 MONTHS \$64,000

NEW HAMPSHIRE

DARTMOUTH COLLEGE

- LANZETTA, JOHN T; THE ROLE OF FACIAL EXPRESSIONS OF EMOTION IN THE ACTIVATION AND CONDITIONING OF EMOTIONAL BEHAVIOR (BNS-7912422 A02); 12 MONTHS \$56,495

UNIVERSITY OF NEW HAMPSHIRE, DURHAM

- NEVIN, JOHN A; REINFORCEMENT OF ATTENDING AND REMEMBERING (BNS-7924082 A02); 12 MONTHS \$29,265

NEW JERSEY

COLLEGE OF MEDICINE & DENTISTRY OF NEW JERSEY

- BROWNING, EDWARD T; HORMONE/SECOND MESSENGER REGULATION OF GLIAL CELL FUNCTION (BNS-8110564 A01); 12 MONTHS \$58,370
 INGOLIA, NICHOLAS A; THE ROLE OF TRANSFER RNA IN THE GIANT AXON OF THE SQUID (BNS-8205689); 3 MONTHS \$12,116

COLLEGE OF MEDICINE & DENTISTRY OF NEW JERSEY-NEW JERSEY MEDICAL SCHOOL

- LUBIT, BEVERLY W; RELATIONSHIP OF CYTOPLASMIC ACTIN TO POSTSYNAPTIC MEMBRANE (BNS-8119086); 24 MONTHS \$68,000

COLLEGE OF MEDICINE & DENTISTRY OF NEW JERSEY-RUTGERS MEDICAL SCHOOL

- GELLER, HERBERT M; THERMOSENSITIVITY OF HYPOTHALAMIC NEURONS IN TISSUE CULTURE (BNS-8116434); 12 MONTHS \$70,455
 EGGER, M DAVID; ANATOMICAL STUDIES OF A CUTANEOUS SPINAL REFLEX (BNS-8205598); 12 MONTHS \$52,045

MONTCLAIR STATE COLLEGE

- TOWNSEND, DAVID J; BEVER, THOMAS G. AND LEBOWITZ, MICHAEL; THE EFFECTS OF ORGANIZATIONAL, FUNCTIONAL, AND BEHAVIORAL PROPERTIES OF TEXT ON SENTENCE PROCESSING (BNS-8120463*); 24 MONTHS \$95,659

PRINCETON UNIVERSITY

- GELPERIN, ALAN; NEUROETHOLOGY OF LEARNING (BNS-8005822 A02); 12 MONTHS \$61,200
 JACOBS, BARRY L; DOPAMINERGIC UNIT ACTIVITY IN MAMMALIAN NEURONS (BNS-8119840); 12 MONTHS \$35,000
 GROSS, CHARLES G; FUNCTIONS OF EXTRASTRIATE VISUAL CORTEX (BNS-8208006); 12 MONTHS \$95,000
 GOULD, JAMES L; ETHOLOGY OF APIS MELLIFERA (BNS-8201004); 12 MONTHS \$53,000
 GLUCKSBERG, SAM; AMBIGUITY AND METAPHOR COMPREHENSION (BNS-8206461); 12 MONTHS \$47,120
 SUGARMAN, SUSAN; CONCEPTUAL PROCESSES IN EARLY CHILDHOOD (BNS-8212157); 14 MONTHS \$28,178

RUTGERS UNIVERSITY-BUSCH CAMPUS

- D'AMATO, MICHAEL R; MODALITY SPECIFICITY IN ANIMALS' COGNITIVE PROCESSES (BNS-8207146); 24 MONTHS \$69,000

RUTGERS UNIVERSITY-COOK COLLEGE

- VAYDA, ANDREW P. AND VONDAL, PATRICIA J; DOCTORAL DISSERTATION RESEARCH IN ANTHROPOLOGY (BNS-8107626); 22 MONTHS \$4,840

RUTGERS UNIVERSITY-DOUGLASS COLLEGE

- SHAW, MARILYN L; SELECTIVE INFORMATION PROCESSING MECHANISMS (BNS-7924885 A02); 12 MONTHS \$41,519
 RAMSAY, DOUGLAS S; LEVELS OF HEMISPHERIC SPECIALIZATION IN INFANCY (BNS-7926702 A01*); 12 MONTHS \$20,218

RUTGERS UNIVERSITY-NEWARK CAMPUS

- CHENG, MEI-FANG; MECHANISMS OF BEHAVIORAL FEEDBACK MODULATION OF ENDOCRINE SYSTEM (BNS-8121495); 12 MONTHS \$50,000

NEW MEXICO

SCHOOL OF AMERICAN RESEARCH

- SCHWARTZ, DOUGLAS W; CONSERVATION OF SOUTHWEST INDIAN POTTERY (BNS-8203668); 12 MONTHS \$25,476

UNIVERSITY OF NEW MEXICO

- STRAUS, L G; ARCHAEOLOGICAL RESEARCH: A STUDY OF ECOLOGICAL ADAPTATION (BNS-8103589 A01); 12 MONTHS \$34,928
 FRITZ, JOHN M; ARCHAEOLOGICAL INVESTIGATIONS IN THE DECCAN (BNS-8119952); 12 MONTHS \$16,669
 SANTLEY, ROBERT S; TEOTIHUACAN INFLUENCE AT MATACAPAN, VERACRUZ (BNS-8120430); 18 MONTHS \$69,983
 WOODWARD, BRUCE; PROXIMAL FACTORS AFFECTING ANURAN BEHAVIOR (BNS-8204329); 3 MONTHS \$9,993

NEW YORK

ADELPHI UNIVERSITY

- DIAKOW, CAROL; IPA MOBILITY ASSIGNMENT (CAROL DIAKOW) (BNS-8119388 A01); 10 MONTHS \$1,510

CITY COLLEGE

- KINZEY, WARREN G. AND WRIGHT, PATRICIA C; DOCTORAL DISSERTATION RESEARCH IN ANTHROPOLOGY (BNS-8115368); 18 MONTHS \$8,977
 NASH, JUNE C; IMPACT OF INDUSTRIAL RESTRUCTURING ON WORKERS' FAMILIES AND COMMUNITIES (BNS-8204006); 12 MONTHS \$23,000

CITY UNIVERSITY OF NEW YORK SYSTEM OFFICE

- GROSS, DANIEL R; BIOMASS ENERGY AND SOCIAL CHANGE IN BRAZIL (BNS-8205101); 24 MONTHS \$80,946

COLGATE UNIVERSITY

- AVENI, ANTHONY F. AND URTON, GARY; ARCHAEOASTRONOMY: GEOMETRIC AND ASTRONOMICAL ORDER (BNS-8102336); 18 MONTHS \$3,350

COLLEGE AT BUFFALO

- KOENIG, EDWARD; LOCAL PROTEIN SYNTHESIS IN THE MAUTHNER NEURON (BNS-8117219); 12 MONTHS \$50,000

COLUMBIA UNIVERSITY-COLLEGE OF PHYSICIANS AND SURGEONS

- SCHWARTZ, JAMES H; MECHANISM OF AXONAL TRANSPORT (BNS-7923111 A02); 12 MONTHS \$66,000
 PFENNINGER, KARL H; FACILITY FOR IMMUNOFLOURESCENCE STUDIES (BNS-8209402); 12 MONTHS \$33,750

COLUMBIA UNIVERSITY

- PFENNINGER, KARL H; INTRACELLULAR EVENTS DURING NEURONAL MEMBRANE GROWTH (BNS-7914071 A03); 12 MONTHS \$57,000
 DOSHER, BARBARA A; RETRIEVAL OF INFORMATION FROM HUMAN MEMORY (BNS-7920305 A02); 12 MONTHS \$30,570
 HILDEBRAND, JOHN G; CELLULAR AND MOLECULAR ANALYSIS OF NEURAL DEVELOPMENT (BNS-8013511 A01); 12 MONTHS \$78,742
 MURPHY, ROBERT F. AND FERGUSON, RICHARD B; DOCTORAL DISSERTATION RESEARCH IN ANTHROPOLOGY (BNS-8113105); 14 MONTHS \$6,170

- TERRACE, HERBERT S; LEARNING AND INTEGRATION OF BEHAVIORAL SEQUENCES (BNS-8202423); 18 MONTHS \$59,294

- ROTTBLAT, HERBERT L; WORKING-MEMORY CODING (BNS-8203017); 24 MONTHS \$80,000

- ROTHMAN, TAUBE P. AND GERSHON, MICHAEL D; NEURONAL DIVERSITY IN THE PNS: DEVELOPMENT OF THE ENTERIC NERVOUS SYSTEM IN NORMAL AND AGANGLIONIC MICE (BNS-8204204); 12 MONTHS \$60,000
 TENNYSON, VIRGINIA M; THE ROLE OF CATECHOLAMINES IN ESTABLISHING APPROPRIATE NEURAL CONNECTIONS (BNS-8309452); 12 MONTHS \$65,000

- HOCHBERG, JULIAN; OPPOSED-SET MEASURES OF PERCEPTUAL INTENTIONS AND COUPLINGS (BNS-8209470*); 12 MONTHS \$54,826

COLUMBIA UNIVERSITY-PRESS

- MOORE, JOHN D. AND SHORE, BRADD; AN ETHNOGRAPHIC MONOGRAPH (BNS-8115191); 12 MONTHS \$3,664

CORNELL UNIVERSITY

- FINLAY, BARBARA L; CONTROL OF CONVERGENCE IN THE MAMMALIAN CENTRAL NERVOUS SYSTEM (BNS-7919491 A02); 12 MONTHS \$33,941
 HALPERN, BRUCE P; A TEMPORAL ANALYSIS OF HUMAN TASTE JUDGEMENTS (BNS-8014148 A02); 12 MONTHS \$58,265
 SHERMAN, PAUL W; KINSHIP, DEMOGRAPHY, AND MAMMALIAN NEPOTISM (BNS-8105285 A01*); 12 MONTHS \$27,461
 NELSON, MARGARET C; MECHANISMS OF SOUND COMMUNICATION IN A SIMPLE SYSTEM (BNS-8108106); 12 MONTHS \$47,705

- KUNIHOLM, PETER I; *AEGEAN DENDROCHRONOLOGY PROJECT* (BNS-8201257); 12 MONTHS \$30,000
- MCKEE, LAURIS A. AND STYCOS, J. M.; *THE SEX RATIO IN ECUADOR: CULTURAL MANAGEMENT AND CULTURAL CHANGE* (BNS-8210224); 12 MONTHS \$57,965
- CORNELL UNIVERSITY-CORNELL UNIVERSITY MEDICAL CENTER
- PICKEL, VIRGINIA M.; *STRUCTURE OF NEOSTRIAL NEUROTRANS-MITTER INTERACTION* (BNS-8023914 A01); 12 MONTHS \$74,545
- DREYFUS, CHERYL F.; *SPECIFICITY IN THE INNERVATION OF THE PARAVENTRICULAR NUCLEUS BY THE LOCUS COERULEUS IN VITRO* (BNS-8024081 A01); 12 MONTHS \$48,517
- CORNELL UNIVERSITY-CORNELL UNIVERSITY - ENDOWED
- EMLIN, STEPHEN T.; *FIELD STUDY OF COOPERATIVE BEHAVIOR* (BNS-7924436 A02*); 12 MONTHS \$29,745
- ADKINS-REGAN, ELIZABETH K. AND OTTINGER, MARY A.; *HORMONES AND BEHAVIORAL DEVELOPMENT IN AN ALTRICIAL BIRD* (BNS-8204462); 12 MONTHS \$45,174
- CORNELL UNIVERSITY-CORNELL UNIVERSITY - STATE
- ADLER, KRAIG; *CUES, RECEPTORS AND MECHANISMS FOR ORIENTA-TION* (BNS-7924525 A01*); 6 MONTHS \$21,000
- HAUSFATER, GLENN; *LONGITUDINAL STUDIES OF PRIMATE SOCI-ETIES* (BNS-8007893 A03*); 12 MONTHS \$26,490
- KIRMEYER, SANDRA L.; *EMPLOYEE REACTIONS TO JOB DEMANDS IN SERVICE SETTINGS* (BNS-8008456 A02); \$20,000
- LUST, BARBARA; *CONSTRAINT ON ANAPHORA IN FIRST LANGUAGE ACQUISITION: A STUDY OF 6 LANGUAGES* (BNS-8206328); 12 MONTHS \$45,473
- CORNELL UNIVERSITY - STATE-AGRICULTURAL EXPERIMENT STATION
- ROELOFS, WENDELL L.; *BEHAVIORAL THRESHOLDS IN PHEROMONE PERCEPTION* (BNS-7809104 A03*); 3 MONTHS \$6,784
- CUNY GRADUATE SCHOOL AND UNIVERSITY CENTER
- NELSON, KATHERINE; *THE ACQUISITION AND USE OF SCRIPTS IN COGNITIVE DEVELOPMENT* (BNS-7914006 A02); 12 MONTHS \$44,500
- WOLF, ERIC R. AND WAHL, LISSIE; *DOCTORAL DISSERTATION RE-SEARCH IN ANTHROPOLOGY* (BNS-8115366); 24 MONTHS \$7,470
- SCRIBNER, SYLVIA; *ACQUISITION OF PRACTICAL PROBLEM-SOLVING SKILLS* (BNS-8208819); 18 MONTHS \$77,937
- NELSON, KATHERINE; *EVENT REPRESENTATIONS IN THE DEVELOP-MENT OF MEMORY AND COGNITION* (BNS-8208904); 14 MONTHS \$62,250
- DOWNSTATE MEDICAL CENTER AT BROOKLYN
- SCALIA, FRANK; *REGENERATION OF OPTIC NERVE FIBERS IN THE VISUAL SYSTEM* (BNS-7923788 A02); 12 MONTHS \$50,363
- HAMILTON COLLEGE
- RUTZ, HENRY J.; *SOCIAL USES OF TIME IN AN URBAN PERIPHERY* (BNS-8120054); 12 MONTHS \$35,303
- HUNTER COLLEGE
- OATES, JOHN F.; *COEXISTENCE, NICHE SEPARATION AND INTERPE-CIFIC ASSOCIATION IN WEST AFRICAN RAIN-FOREST CERCOPIITHECI-DAE* (BNS-8120206); 12 MONTHS \$28,050
- OATES, JOHN F. AND MUSKIN, ALIES; *DOCTORAL DISSERTATION RE-SEARCH IN ANTHROPOLOGY* (BNS-8200861); 18 MONTHS \$8,402
- SZALAY, FREDERICK S. AND DAGOSTO, MARIAN; *DOCTORAL DISSER-TATION IN ANTHROPOLOGY* (BNS-8203982); 12 MONTHS \$6,653
- LEHMAN COLLEGE
- KRAMER, CAROL; *ETHNOGRAPHY OF CERAMIC PRODUCTION AND DISTRIBUTION IN RAJASTHAN, INDIA* (BNS-8202992); 24 MONTHS \$61,723
- MOUNT SINAI SCH OF MED CITY UNIV OF NEW YORK
- AZMITIA, EFRAN C.; *INDUCED 5-HT AXONAL SPROUTING IN ADULT HIPPOCAMPUS* (BNS-7906474 A03); 7 MONTHS \$33,494
- EISENMAN, JOSEPH S. AND AZMITIA, EFRAN C.; *NEURAL CONTROL OF THERMOREGULATORY SALIVATION IN RATS* (BNS-7907245 A02); 12 MONTHS \$47,000
- NEW SCHOOL FOR SOCIAL RESEARCH
- RAPP, RAYNA, AND CONTE, CHRISTINE; *DOCTORAL DISSERTATION RESEARCH IN ANTHROPOLOGY* (BNS-8112678); 12 MONTHS \$7,999
- NEW YORK UNIVERSITY-MEDICAL CENTER
- MARGOLIS, RICHARD U.; *COMPLEX CARBOHYDRATES OF NERVOUS TISSUE STORAGE ORGANELLES* (BNS-8209985); 12 MONTHS \$55,000
- NEW YORK UNIVERSITY
- DEUTSCH, MARTIN, AND JORDAN, THERESA J.; *LONG-TERM EFFECTS OF EARLY INTERVENTION ON CHILDREN* (BNS-7917636 A01); 12 MONTHS \$65,000
- MURPHY, RANDALL B. AND VODYANOV, VITALY; *THE INCORPORATION OF CHEMOSENSITIVE ION CHANNELS FROM THE OLFACTORY EPITHELIUM INTO PLANAR LIPID BIMOLECULAR MEMBRANES* (BNS-8118761); 24 MONTHS \$72,475
- RESEARCH FOUNDATION FOR MENTAL HYGIENE INC
- STONE, ARTHUR A. AND NEALE, JOHN M.; *DEVELOPMENT OF A METHODOLOGY TO MEASURE THE IMPACT OF DAILY LIFE EVENTS* (BNS-7923715 A02); 12 MONTHS \$59,985
- TAMIR, HADASSAH; *BIOGENIC AMINE TRANSFER AND STORAGE MECHANISMS* (BNS-8009335 A02); 12 MONTHS \$43,000
- GIBBON, JOHN; *THEORY OF ANIMAL TIMING* (BNS-8119748); 12 MONTHS \$27,857
- SCHWARTZ, JAMES H.; *BIOCHEMICAL STUDIES IN IDENTIFIED NEU-RONS* (BNS-8215311); 12 MONTHS \$52,872
- ROCKEFELLER UNIVERSITY
- PATON, JOHN A. AND NOTTEBOHM, FERNANDO; *NEUROPHYSIOLOGY OF VOCAL CONTROL* (BNS-7924602 A02); 12 MONTHS \$59,059
- NORGREN, RALPH E.; *GUSTATORY AND VISCERAL AFFERENT NEURAL ORGANIZATION* (BNS-8006444 A02); 12 MONTHS \$71,000
- RUBIN, LEE L.; *REGULATORY EVENTS IN NERVE-MUSCLE SYNAPSE FORMATION* (BNS-8111361 A01); 12 MONTHS \$75,000
- PFAMMANN, CARL; *ELECTRO-CHEMICAL STIMULATION OF TASTE CHEMORECEPTORS* (BNS-8111816 A01); 12 MONTHS \$61,000
- MARLER, PETER R.; *COMPARATIVE STUDIES OF SIGNAL STRUCTURE AND FUNCTION* (BNS-8118769); 12 MONTHS \$64,674
- MARLER, PETER R.; *COMPARATIVE STUDIES OF SIGNAL STRUCTURE AND FUNCTION* (BNS-8118769 A01); \$16,118
- KAPLAN, EHUD; *EFFERENT MODULATION OF PHOTORECEPTOR FUNCTION* (BNS-8203747); 36 MONTHS \$49,084
- STATE UNIVERSITY AT ALBANY
- ABLE, KENNETH P.; *FIELD-EXPERIMENTAL STUDIES OF MIGRATORY ORIENTATION AND NAVIGATION* (BNS-7923711 A02); 12 MONTHS \$20,995
- PULLIAM, H. RONALD; *FEEDING PREFERENCES, RESOURCE PARTI-TIONING, AND THE COEXISTENCE OF SPECIES* (DEB-8013017 A01*); 24 MONTHS \$15,000
- BROWN, JERRAM L.; *AID-GIVING WITHIN GROUPS* (BNS-8115589*); 12 MONTHS \$22,998
- MURPHEY, RODNEY K.; *DEVELOPMENT OF SELECTIVE CONNECTI-VITY IN A SIMPLE NERVOUS SYSTEM* (BNS-8119799*); 12 MONTHS \$55,000
- WEIST, RICHARD M.; *THE ACQUISITION OF POLISH: TEMPORAL DEIXIS AND BASIC RELATIONS* (BNS-8121133); 24 MONTHS \$16,200
- JACKLET, JON W.; *MECHANISMS OF CIRCADIAN RHYTHMS IN NEUR-ONAL PACEMAKERS* (BNS-8206245); 12 MONTHS \$55,000
- STATE UNIVERSITY AT BINGHAMTON
- PASTORE, RICHARD E.; *PSYCHOPHYSICS FOR SPEECH PERCEPTION* (BNS-8003704 A02*); 12 MONTHS \$30,220
- AMMERMAN, ALBERT J. AND SHAFFER, GARY D.; *DOCTORAL DISSER-TATION RESEARCH IN ANTHROPOLOGY* (BNS-8111348); 6 MONTHS \$4,533
- LESLIE, PAUL W. AND JONES, ROBERT E.; *DOCTORAL DISSERTATION RESEARCH IN ANTHROPOLOGY* (BNS-8115586); 20 MONTHS \$3,490
- AMMERMAN, ALBERT J.; *EARLY CULTURAL ADAPTATIONS IN THE CENTRAL SAHARA* (BNS-8116295); 12 MONTHS \$9,289
- REDMAN, CHARLES L.; *IPA MOBILITY ASSIGNMENT* (CHARLES L. REDMAN) (BNS-8211270); 12 MONTHS \$55,791
- STATE UNIVERSITY AT BUFFALO
- PRUITT, DEAN G.; *FACTORS AFFECTING INTEGRATIVE BARGAINING* (BNS-8014902 A02); 12 MONTHS \$48,546
- STATE UNIVERSITY AT STONY BROOK
- COHEN, DAVID H.; *CELLULAR STUDIES OF LEARNING IN A VERTE-BRATE MODEL SYSTEM* (BNS-8015396 A01); 12 MONTHS \$89,975
- MCKELVY, JEFFREY F.; *REGULATION OF HYPOTHALAMIC NEUROEN-DOCRINE PEPTIDES* (BNS-8111475); 12 MONTHS \$82,408
- STERN, JACK T.; *PRIMATE LOCOMOTION* (BNS-8119664); 24 MONTHS \$134,968
- JUNGERS, WILLIAM L.; *SYMPOSIUM ON SIZE AND SCALING IN PR-I-MATE BIOLOGY* (BNS-8205742); 6 MONTHS \$4,784
- STATE UNIVERSITY AT STONY BROOK-SUNY-HEALTH SCIENCES CENTER STONY BROOK
- FLEAGLE, JOHN G.; *EARLY ANTHROPOID DEVELOPMENT* (BNS-8210949); 12 MONTHS \$28,923
- SYRACUSE UNIVERSITY
- SMITH, ROBERT L.; *SATURATION, ADAPTATION, AND DYNAMIC RANGE OF SINGLE AUDITORY NEURONS* (BNS-8104089 A01); 12 MONTHS \$49,374
- BARLOW, ROBERT B.; *EFFERENT CONTROL OF VISUAL SENSITIVITY* (BNS-8104669 A01); 12 MONTHS \$54,428
- TEACHERS COLLEGE
- DEUTSCH, MORTON; *INTERDEPENDENCE AND PSYCHOLOGICAL ORI-ENTATION* (BNS-8207638); 24 MONTHS \$114,800
- UNIVERSITY OF ROCHESTER
- MAKOUS, WALTER; *RELATING PHYSIOLOGY TO MORPHOLOGY-CONFERENCE JUNE, 1982; ROCHESTER, *N**Y** (BNS-8204089); 6 MONTHS \$9,712
- SLADEK, JOHN R.; *ONTOGENY OF PEPTIDE-MONOAMINE NEURON IN-TERACTIONS* (BNS-8206061); 12 MONTHS \$45,479
- DOTY, ROBERT W.; *INTERHEMISPHERIC MNEMONIC TRANSFER* (BNS-8208583); 12 MONTHS \$75,000
- UPSTATE MEDICAL CENTER AT SYRACUSE
- DURKOVIC, RUSSELL G.; *NEURAL MECHANISMS OF A CLASSICALLY CONDITIONED REFLEX* (BNS-8023943 A01); 12 MONTHS \$52,200
- YESHIVA UNIVERSITY-ALBERT EINSTEIN COLLEGE OF MEDICINE
- RUFF, HOLLY; *THE VISUAL RECOGNITION OF MOTIONS AND OF MOVING OBJECTS* (BNS-8013064 A01); 12 MONTHS \$52,184
- ZUKIN, R. SUZANNE; *MODEL STUDIES OF SENSORY RECEPTOR IN-TERACTIONS* (BNS-8019780 A01); 12 MONTHS \$66,301
- SCHARRER, BERTA; *NEUROENDOCRINE STUDIES* (BNS-8113109); 24 MONTHS \$77,000

YESHIVA UNIVERSITY

- FISHMAN, JOSHUA A.; *MINORITY LANGUAGES IN THE U. S.* (BNS-7906055 A02); 12 MONTHS \$60,000
 FISHMAN, JOSHUA A.; *MINORITY LANGUAGES IN THE UNITED STATES: DEMOGRAPHIC AND LINGUISTIC PERSPECTIVES* (BNS-8205967); 12 MONTHS \$45,153

NORTH CAROLINA

DUKE UNIVERSITY

- STADDON, JOHN E.; *BEHAVIORAL COMPETITION: STATICS AND DYNAMICS* (BNS-7915114 A02); 12 MONTHS \$36,585
 ERICKSON, ROBERT P.; *NEURON TYPOLOGIES IN GUSTATION* (BNS-8021604 A1); \$1,950
 HALL, WILLIAM C.; *STRUCTURAL ORGANIZATION OF THE SUPERIOR COLLICULUS* (BNS-8109794 A01); 12 MONTHS \$62,492
 SIMON, ELWYN L.; *RESEARCH ON TARSUS: PHYLETIC AFFINITIES, KARYOLOGY, BIOCHEMISTRY, ANATOMY, AND CAPTIVE BEHAVIOR* (BNS-8110529*); 12 MONTHS \$39,529
 SACKS, KAREN; *WOMEN'S WORKPLACE CULTURE AND KINSHIP* (BNS-812102*); 24 MONTHS \$61,310
 QUINN, NAOMI; *CULTURAL MODELS OF AMERICAN MARRIAGE* (BNS-8205739); 18 MONTHS \$27,998
 DIAMOND, IRVING T.; *LAMINAR ORGANIZATION OF CORTEX AND LATERAL GENICULATE BODY* (BNS-8209081); 12 MONTHS \$50,000
 CONNER, WILLIAM E.; *TEMPORALLY PATTERNED PHEROMONE SIGNALS* (BNS-8209995); 24 MONTHS \$44,995

DUKE UNIVERSITY-SCHOOL OF MEDICINE

- SIMONS, ELWYN L. AND KAY, RICHARD F.; *ANTHROPOLOGICAL AND PALEONTOLOGICAL RESEARCH INTO THE FOSSIL ANTHROPOID SITES OF THE EGYPTIAN TERTIARY* (BNS-8016206 A02); 12 MONTHS \$132,717

NORTH CAROLINA FDN FOR MENTAL HEALTH RES INC

- OPPENHEIM, RONALD W.; *NEURONAL CELL DEATH IN THE CHICK EMBRYO* (BNS-7924088 A02); 12 MONTHS \$72,162

UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL-SCHOOL OF MEDICINE

- MYERS, R D.; *CHEMICAL FACTORS IN THE BRAIN INVOLVED IN INGESTIVE BEHAVIOR* (BNS-7824491 A03); 12 MONTHS \$65,001
 OXFORD, GERRY S.; *SODIUM CHANNEL GATING MECHANISMS: A MOLECULAR STUDY* (BNS-7921505 A02); 12 MONTHS \$47,778

UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL

- WEST, MEREDITH J.; *DEVELOPMENTAL AND FUNCTIONAL ANALYSIS OF AVIAN VOCAL LEARNING* (BNS-8023108 A01); 12 MONTHS \$29,216

WAKE FOREST UNIVERSITY

- TYTELL, MICHAEL; *GLIAL PROTEINS TRANSFERRED INTO THE GIANT AXON OF THE SQUID* (BNS-8116677); 12 MONTHS \$19,999

NORTH DAKOTA

NORTH DAKOTA STATE UNIVERSITY MAIN CAMPUS

- BEATTY, WILLIAM W.; *HORMONAL ORGANIZATION OF SOCIAL BEHAVIOR* (BNS-8201448); 24 MONTHS \$70,000

OHIO

BOWLING GREEN STATE UNIVERSITY

- GROMKO, MARK H.; *PRODUCTION OF VARIATION IN THE CONTROL OF BEHAVIOR* (BNS-8201183); 24 MONTHS \$60,000

CLEVELAND MUSEUM OF NATURAL HISTORY

- KIMBEL, WILLIAM H.; *FEASIBILITY STUDY FOR THE CONSERVATION OF THE HAMANN-TODD OSTEOLOGICAL COLLECTION* (BNS-8200983); 6 MONTHS \$2,432

NORTHEASTERN OHIO UNIVS COLLEGE OF MEDICINE

- TEYLER, TIMOTHY J.; *LONG-TERM POTENTIATION* (BNS-7823947 A01); 12 MONTHS \$7,872

OBERLIN COLLEGE

- HENDERSON, NORMAN D.; *THE GENETIC ARCHITECTURE OF DEVELOPING BEHAVIOR* (BNS-8121540); 12 MONTHS \$41,468

OHIO STATE UNIVERSITY

- MARTIN, GEORGE F.; *THE DEVELOPMENT OF BRAINSTEM-SPINAL SYSTEMS RELATED TO AUTONOMIC CONTROL, PAIN MODULATION AND SOMATIC MOTOR ACTIVITY* (BNS-8008675 A02); 12 MONTHS \$66,000
 JONES, MARI R.; *EFFECTS OF TEMPORAL CONTEXT UPON ATTENTION/PERCEPTION* (BNS-8204811); 24 MONTHS \$105,000

OKLAHOMA

UNIVERSITY OF OKLAHOMA NORMAN CAMPUS

- MOCK, DOUGLAS W.; *ECOLOGICAL DETERMINANTS OF AGGRESSION AMONG GENETICALLY RELATED INDIVIDUALS* (DEB-8201552*); 24 MONTHS \$15,000

OREGON

GOOD SAMARITAN HOSPITAL AND MEDICAL CENTER

- BELL, CURTIS C.; *CENTRAL PHYSIOLOGY & ANATOMY OF THE MORMYRID ELECTROSENSORY SYSTEM* (BNS-7905086 A03); 12 MONTHS \$73,335

OREGON STATE UNIVERSITY

- BLAUSTEIN, ANDREW R.; *THE ROLE OF EXPERIENCE IN THE DEVELOPMENT OF BEHAVIOR IN A MODEL SYSTEM* (BNS-8120900); 24 MONTHS \$74,000

UNIVERSITY OF OREGON - EUGENE

- POSNER, MICHAEL I.; *ORIENTING IN VISUAL AND SEMANTIC SPACE* (BNS-7923527 A02*); 12 MONTHS \$44,838
 HOYLE, GRAHAM; *NEURAL MECHANISMS UNDERLYING BEHAVIOR* (BNS-7923786 A02); 12 MONTHS \$65,000
 SIMMONS, JAMES A.; *PROCESSING OF ECHOES IN BAT SONAR* (BNS-8013170 A02); 12 MONTHS \$54,671
 WESTERFIELD, MONTE; *DEVELOPMENT AND MAINTENANCE OF MO-TO-NEURONAL CONNECTIVITY* (BNS-8103573 A01); 12 MONTHS \$35,000
 KIMMEL, CHARLES B.; *LINEAGE ANALYSIS OF NEURODEVELOPMENT* (BNS-8112477); 24 MONTHS \$100,000
 KEELE, STEVEN W.; *SPEED, TIMING, AND COORDINATION OF REPETITIVE MOTOR ACTIVITY* (BNS-8119274); 12 MONTHS \$45,913
 ROTHBART, MYRON; *DISCONFIRMATION OF STEREOTYPIC BELIEFS* (BNS-8203731); 24 MONTHS \$94,754
 BERSACK, ALETTA; *CHANGE AS A SOCIAL ORGANIZATIONAL AND MILLENARIAN PROCESS* (BNS-8204514); 24 MONTHS \$40,664
 GIVON, TALMY, AND COOREMAN, ANN; *DOCTORAL DISSERTATION RESEARCH IN LINGUISTICS* (BNS-8208781); 24 MONTHS \$9,394

PENNSYLVANIA

BRYN MAWR COLLEGE

- KAHN, MIRIAM; *THE CULTURAL ECOLOGY OF AN IRRIGATION SYSTEM* (BNS-8005243 A02); 12 MONTHS \$21,000
 ROSS, MARC H.; *CROSS CULTURAL SOURCES OF INTERNAL CONFLICT AND EXTERNAL WARFARE* (BNS-8203381); 18 MONTHS \$42,132

CARNEGIE INSTITUTE

- POZORSKI, THOMAS G. AND POZORSKI, SHELIA; *ABSOLUTE DATING FOR EARLY SITES IN THE CASMA VALLEY, PERU* (BNS-8203452); 12 MONTHS \$6,542

CARNEGIE-MELLON UNIVERSITY

- SCHIEFER, MICHAEL F.; *COOPERATIVE RESEARCH ON SELF-ALTERATION, EXPECTANCY, AND BEHAVIORAL REGULATION* (BNS-8021859 A01); 12 MONTHS \$34,018
 MACWHINNEY, BRIAN; *THE IMPACT OF POINT-MAKING ON SYNTACTIC STRUCTURE* (BNS-8122162); 6 MONTHS \$20,816
 MACWHINNEY, BRIAN; *THE IMPACT OF POINT-MAKING ON SYNTACTIC STRUCTURE* (BNS-8122162 A01); 12 MONTHS \$48,148
 ANDERSON, JOHN R.; *SPREADING ACTIVATION AND MEMORY RETRIEVAL: FURTHER TESTS OF THE ACT THEORY* (BNS-8208189); 12 MONTHS \$72,581

- HAYES, JOHN R. AND FLOWER, LINDA S.; *COGNITIVE PROCESSES IN REVISION* (BNS-8210492); 24 MONTHS \$99,991

- COHEN, SHELDON; *MECHANISMS INVOLVED IN THE BEHAVIORAL AFTEREFFECTS OF STRESS* (BNS-8242341); 12 MONTHS \$22,550

MEDICAL COLLEGE OF PENNSYLVANIA

- GOLDBERGER, MICHAEL E.; *AXONAL SPROUTING AND FUNCTIONAL RECOVERY IN THE CNS* (BNS-8024175 A01); 12 MONTHS \$83,000
 DRATMAN, MARY B.; *NATURE AND ACTIONS OF NEURAL IODOCOMPOUNDS* (BNS-8210354); 12 MONTHS \$50,000

MONELL CHEMICAL SENSES CENTER

- SMITH, AMOS B.; *GAS CHROMATOGRAPH/MASS SPECTROMETER/DATA SYSTEM FOR RESEARCH IN CHEMICAL SENSES* (BNS-8120743); 12 MONTHS \$125,000

- BEAUCHAMP, GARY K. AND WELLINGTON, JUDITH L.; *CHEMICAL COMMUNICATION IN MAMMALS* (BNS-8201759*); 12 MONTHS \$57,000

- PRETI, GEORGE, AND CUTLER, WINNIFRED B.; *OLFACTORY INFLUENCES ON PHYSIOLOGICAL PARAMETERS* (BNS-8203018*); 24 MONTHS \$55,000

PENNSYLVANIA STATE UNIVERSITY

- NELSON, KEITH E.; *RECASTS AND RELATED COMPONENTS OF INPUT IN CHILDREN'S LANGUAGE ACQUISITION* (BNS-8013767 A01); 12 MONTHS \$33,531

- SANDERS, WILLIAM T.; *LABORATORY ANALYSIS OF ARCHAEOLOGICAL COLLECTIONS FROM TLAJINGA 33, TEOTIHUACAN, MEXICO* (BNS-8204862); 12 MONTHS \$29,935

- SHULMAN, GORDON L.; *SPATIAL FREQUENCY MECHANISMS OF SELECTIVE ATTENTION* (BNS-8209604); 24 MONTHS \$52,296

SWARTHMORE COLLEGE

- KEMLER, DEBORAH G.; *DEVELOPMENT OF PERCEPTUAL AND ANALYTIC SKILLS* (BNS-7924035 A02); 12 MONTHS \$38,794

- SCHWARTZ, BARRY; *ORGANIZATION OF COMPLEX SEQUENCES OF BEHAVIOR* (BNS-8206670); 33 MONTHS \$78,355

- KELLMAN, PHILIP J.; *THE KINETICS OF UNITY AND FORM PERCEPTION IN INFANCY* (BNS-8210110); 12 MONTHS \$58,380

TEMPLE UNIVERSITY-SCHOOL OF MEDICINE

- KIM, SANGDUK; *ROLE OF PROTEIN CARBOXYL METHYLATION ON NEUROPEPTIDES AND IN NEUROHYPOPHYSIAL TISSUES* (BNS-8119686); 12 MONTHS \$48,000

TEMPLE UNIVERSITY

- MARGULES, DAVID L.; *NEUROCHEMISTRY OF OBESITY AND LEARNED TASTE AVERSIONS* (BNS-7920616 A02); 12 MONTHS \$78,000

- RANER, ANTHONY J., COOKE, RICHARD G. AND ADAMS, JOHN; *ENVIRONMENT, SETTLEMENT AND SUBSISTENCE IN AN ARCHAEOLOGICAL CONTEXT* (BNS-8112475 A01); 24 MONTHS \$79,983

- O'BRIEN, DENISE, AND SMALL, CATHY A.; *DOCTORAL DISSERTATION RESEARCH IN ANTHROPOLOGY* (BNS-8114473); 24 MONTHS \$8,021

DAHLIN, BRUCE H; THE EL MIRADOR MAPPING PROJECT (BNS-8120982; 12 MONTHS \$55,094

UNIVERSITY OF PENNSYLVANIA

PUGH, EDWARD N; QUANTITATIVE CHARACTERIZATION OF CHROMATIC ADAPTATION THROUGH THE TWO-COLOR INCREMENT THRESHOLD (BNS-7924163 A02; 12 MONTHS \$47,000
GELMAN, ROCHÉL; COGNITIVE DEVELOPMENT (BNS-8004881 A02; 12 MONTHS \$72,455

POSSEHL, GREGORY L; SURVEY, INVENTORY AND RENOVATION OF COLLECTION STORAGE AT THE UNIVERSITY MUSEUM (BNS-8005836 A01; 6 MONTHS \$11,545

POSSEHL, GREGORY L; SURVEY, INVENTORY AND RENOVATION OF COLLECTION STORAGE AT THE UNIVERSITY MUSEUM (BNS-8005836 A02; 27 MONTHS \$47,046

NACHMIAS, JACOB; MECHANISMS OF SPATIAL INTERACTION IN HUMAN VISION (BNS-8008669 A01; 12 MONTHS \$54,564

LABOV, WILLIAM; THE INFLUENCE OF URBAN MINORITIES ON LINGUISTIC CHANGE (BNS-8023506 A01; 17 MONTHS \$91,228

PREMACK, DAVID; COMPARATIVE INTELLIGENCE (BNS-8023574 A02*; 12 MONTHS \$124,703

DAVIS, THOMAS L; MICROCIRCUITRY OF VISUAL CORTEX (BNS-8119839; 24 MONTHS \$100,000

ADLER, NORMAN T; BIOPSYCHOLOGY OF REPRODUCTION (BNS-8120816*; 12 MONTHS \$33,000

GRILL, HARVEY J; NEURAL HIERARCHY IN THE MODULATION OF INGESTIVE BEHAVIOR (BNS-8210734; 12 MONTHS \$58,000

UNIVERSITY OF PITTSBURGH

BERGER, THEODORE W; LIMBIC NEURAL PLASTICITY AND LEARNED BEHAVIOR (BNS-8021395 A01; 12 MONTHS \$40,090

VILLANOVA UNIVERSITY

STEPHENS, PHILIP J; NERVE-MUSCLE RELATIONSHIPS IN CLAW DEVELOPMENT (BNS-8113196; 24 MONTHS \$54,924

PUERTO RICO

UNIV OF PUERTO RICO MEDICAL SCIENCES CAMPUS

FALK, DEAN; BRAIN DEVELOPMENT IN FOSSIL HOMINIDS (BNS-8303764; 12 MONTHS \$12,851

RHODE ISLAND

BROWN UNIVERSITY

ANDERSON, JAMES A; COGNITIVE APPLICATIONS OF MATRIX MEMORY MODELS (BNS-7923000 A02*; 12 MONTHS \$19,567

WAAGE, JONATHAN K; BEHAVIORAL STRATEGIES IN GENETIC TRANSMISSION IN ODNATA (DEB-8004382 A02*; 12 MONTHS \$14,271

EBNER, FORD F; THE REORGANIZATION OF CORTEX FOLLOWING THALAMIC REMOVAL (BNS-8022488 A01; 12 MONTHS \$79,999

BLOUGH, DONALD S; AND BLOUGH, PATRICIA M; PROCESSES OF STIMULUS CONTROL (BNS-8025515 A01; 12 MONTHS \$86,146

SCHMIDT, PETER R; HISTORIC ARCHAEOLOGY AND ETHNOARCHAEOLOGY IN BUHAYA, TANZANIA (BNS-8130385; 12 MONTHS \$9,625

SIROVICH, LAWRENCE; ASYMPTOTIC TECHNIQUES FOR PROBLEMS IN VISION (MCS-8131414*; 12 MONTHS \$8,000

SCHRIER, ALLAN M; EYE MOVEMENTS DURING PERFORMANCE OF VISUAL TASKS (BNS-8201241; 12 MONTHS \$54,767

ANDERSON, DOUGLAS D; AND GERLACH, S C; DOCTORAL DISSERTATION RESEARCH IN ANTHROPOLOGY (BNS-8207553; 11 MONTHS \$9,326

ANDERSON, DOUGLAS D; ARCHAEOLOGICAL RESEARCH IN NORTH-WEST ALASKA (BNS-8207950; 11 MONTHS \$54,873

CHURCH, RUSSELL M; THE NUMERICAL ATTRIBUTE OF STIMULI (BNS-8209834; 24 MONTHS \$81,000

GORDON RESEARCH CONFERENCES

CRUCKSHANK, ALEXANDER M; SENSORY TRANSDUCTION IN MICRO-ORGANISMS (BNS-8201403; 12 MONTHS \$10,000

SOUTH CAROLINA

MEDICAL UNIVERSITY OF SOUTH CAROLINA

CROUCH, ROSALIE K; SYNTHETIC PHOTOSENSITIVE PIGMENTS (BNS-8011563 A02; 12 MONTHS \$56,174

ADAMS, JOE C; CYTOLOGY AND CONNECTIONS OF THE AUDITORY SYSTEM (BNS-8110222; 24 MONTHS \$100,000

UNIVERSITY OF SOUTH CAROLINA AT COLUMBIA

DAVIS, CRAIG W; REGULATION OF CYCLIC NUCLEOTIDE PHOSPHODIESTERASES IN THE CENTRAL NERVOUS SYSTEM (BNS-8117808; 24 MONTHS \$99,982

VERNBORG, F JOHN; ACQUISITION OF EQUIPMENT FOR BARUCH FIELD LABORATORY (BSR-8309109*; 12 MONTHS \$45,000

TENNESSEE

HILL WILKINSON HEARING & SPEECH CENTER

GRANTHAM, D WESLEY; DYNAMIC BINAURAL PROCESSING (BNS-8040747 A01; 12 MONTHS \$46,000

VANDERBILT UNIVERSITY

HARRIS, ALICE C; THE EVOLUTION OF CASE-MARKING TYPES (BNS-7923459 A01; 12 MONTHS \$21,217

LAPPIN, JOSEPH S; GEOMETRIC AND STATISTICAL DETERMINANTS OF METRIC STRUCTURE IN VISUAL PATTERNS (BNS-8112473 A01; 12 MONTHS \$44,130

POWERS, MAUREEN K; COLLABORATIVE RESEARCH: MODIFIABILITY OF PHOTORECEPTORS AND VISUAL SENSITIVITY (BNS-8200981; 12 MONTHS \$33,844

WALL, JOHN T; CONSEQUENCES OF DAMAGE IN THE SOMATOSENSORY SYSTEM (BNS-8205745; 24 MONTHS \$99,991

TEXAS

NORTH TEXAS STATE UNIVERSITY

SCHAFER, ROLLIE; CHEMICALLY ACTIVE ODORANTS AS CHEMICAL PROBES OF OLFACTION (BNS-8108842 A01; 12 MONTHS \$51,382

SOUTHERN METHODIST UNIVERSITY

WENDORF, FRED; PREHISTORY OF EGYPT (BNS-8023411 A01; 24 MONTHS \$130,000

SARGENT, CAROLYN F; AN ANALYSIS OF TRADITIONAL OBSTETRICAL PRACTICES (BNS-8203842; 12 MONTHS \$18,315

WOOSLEY, ANNE I, AND MCKEAN, MARGARET B; DOCTORAL DISSERTATION RESEARCH IN ANTHROPOLOGY (BNS-8209381; 12 MONTHS \$2,768

SAMFSON, GARTH; DETECTION OF TERRITORIAL EDGES AND MOBILITY PATTERNS (BNS-8210085; 9 MONTHS \$60,239

HAAS, HERBERT; SUPPORT OF A RADIOCARBON DATING FACILITY (BNS-8211974; 12 MONTHS \$79,110

WENDORF, FRED, AND CHRISTOPHER, K CHRIS; DOCTORAL DISSERTATION RESEARCH IN ANTHROPOLOGY (BNS-8213577; 6 MONTHS \$1,900

TEXAS A & M UNIVERSITY

VULLIET, PHILIP R; BIOCHEMICAL REGULATION OF TYROSINE HYDROXYLASE (BNS-8118957; 12 MONTHS \$50,000

TEXAS TECH UNIVERSITY

CARROLL, PAUL T; VESICULAR SYNTHESIS AND RELEASE OF ACETYLCHOLINE (BNS-8117975; 24 MONTHS \$76,000

UNIV OF TEXAS AT ARLINGTON

COLEMAN, PAUL G, SHARMA, SURESH C, AND DIANA, LEONARD M; THE SIXTH INTERNATIONAL CONFERENCE ON POSITRON ANNIHILATION; ARLINGTON, TEXAS, APRIL 3-7, 1982 (DMR-8113227*; 12 MONTHS \$1,500

UNIV OF TEXAS AT AUSTIN

THOMPSON, WESLEY J; RE-INNervation OF MUSCLE IN VITRO (BNS-8019721 A01; 12 MONTHS \$45,000

POLLAK, GEORGE D; REPRESENTATION OF BINAURAL INFORMATION IN THE BAT'S INFERIOR COLLICULUS (BNS-8110227 A01; 12 MONTHS \$60,478

SHERZER, JOEL, AND KRATZ, CORINNE A; DOCTORAL DISSERTATION RESEARCH IN ANTHROPOLOGY (BNS-8112153; 24 MONTHS \$8,265

FERNEA, ROBERT A, AND GILES, LINDA L; DOCTORAL DISSERTATION RESEARCH IN ANTHROPOLOGY (BNS-8115364; 22 MONTHS \$6,455

KYLE, JOHN H; MAYA RAISED-FIELD AGRICULTURE AND SETTLEMENT AT PULLTROUSER SWAMP, BELIZE (BNS-8115790; 36 MONTHS \$4,967

MCCARTHY, JOHN J; NONCONCATENATIVE MORPHOLOGY (BNS-8121002; 24 MONTHS \$19,334

CREWS, DAVID P; PARTHENOGENESIS: A MODEL FOR SEXUAL DIFFERENTIATION (BNS-8202531*; 12 MONTHS \$20,000

KYLE, JOHN H; AN ANALYTICAL DICTIONARY OF NAHUATL (BNS-8207810; 18 MONTHS \$7,500

KARTTUNEN, FRANCES; SPANISH LANGUAGE CONTACT PHENOMENA IN NAHUATL AND IN YUCATECAN MAYA (BNS-8208213; 24 MONTHS \$100,000

HORN, JOSEPH M, LOEHLIN, JOHN C, AND WILLERMAN, LEE; TEN-YEAR FOLLOW-UP OF THE TEXAS ADOPTION STUDY (BNS-8209882; 12 MONTHS \$82,663

UNIV OF TEXAS AT SAN ANTONIO

TSIN, ANDREW T; CHROMOPHORE UTILIZATION BY VERTEBRATE PHOTORECEPTORS (BNS-8203064; 24 MONTHS \$52,372

UNIV OF TEXAS HEALTH SCIENCE CENTER AT DALLAS

MIHAILOFF, GREGORY A; THE AFFERENT AND EFFERENT CONNECTIVITY OF BASILAR PONS (BNS-8004853 A02; 12 MONTHS \$35,000

ROSENBERG, ROGER N; INDUCTION OF A BRAIN PROTEIN IN NEUROBLASTOMA GLIOMA CO-CULTURES (BNS-8013442 A01; 12 MONTHS \$58,996

UNIV OF TEXAS HEALTH SCIENCE CENTER AT HOUSTON

SPEERLING, HARRY G; COLOR RECEPTOR MOSAIC OF PRIMATES (BNS-7925599 A02; 12 MONTHS \$57,504

BOUDREAU, JAMES C; NEUROPHYSIOLOGICAL ANALYSIS OF SENSORY SYSTEMS OF THE FACIAL NERVE (BNS-8013036 A02; 12 MONTHS \$75,000

OBERDORFER, MICHAEL D; IPA MOBILITY ASSIGNMENT (MICHAEL D. OBERDORFER) (BNS-8217507; 12 MONTHS \$42,384

UNIV OF TEXAS MEDICAL BRANCH AT GALVESTON

PINSKER, HAROLD; NEUROETHOLOGICAL ANALYSIS OF SIMPLE REFLEXES (BNS-8016431 A02; 12 MONTHS \$41,000

UTAH

UNIVERSITY OF UTAH-COLLEGE OF MEDICINE

HORCH, KENNETH W; SPECIFICITY IN REGENERATING MAMMALIAN SENSORY NEURONS (BNS-7918565 A02; 12 MONTHS \$48,180

UNIVERSITY OF UTAH

CRUTCHER, KEITH A; NEUROTRANSMITTER AND RECEPTOR PLASTICITY (BNS-8103678; 12 MONTHS \$30,876

- MIXCO, MAURICIO J. HISTORICAL DEVELOPMENT OF KILIWA SYNTAX (BNS-8114921); 24 MONTHS \$34,999
- JACOBSON, MARCUS. CLONAL ANALYSIS OF A VERTEBRATE CENTRAL NERVOUS SYSTEM (BNS-8116768); 12 MONTHS \$58,000
- O'CONNELL, JAMES F. AND SIMMS, STEVEN R. DOCTORAL DISSERTATION RESEARCH IN ANTHROPOLOGY (BNS-8120411); 14 MONTHS \$1,150
- HAWKES, KRISTEN. TROPICAL FORAGING STRATEGIES (BNS-8121209); 24 MONTHS \$87,200
- BROWN, FRANCIS H. AND CERLING, THURE E. STRATIGRAPHIC STUDIES IN THE TURKANA BASIN WITH EMPHASIS ON THE KOBI FORA REGION (BNS-8210735); 24 MONTHS \$135,256

VERMONT

UNIVERSITY OF VERMONT

- ARIANO, MARJORIE A. CYCLIC NUCLEOTIDE AND NEUROTRANSMITTER CYTOCHEMISTRY IN THE CAUDATE NUCLEUS (BNS-8108648 A01); 12 MONTHS \$58,000
- VAN HOUTEN, JUDITH. GENETIC DISSECTION OF CHEMORECEPTION (BNS-8112176); 12 MONTHS \$44,264
- PARSONS, RODNEY L. SYNAPTIC INTERACTION AT PEPTIDERGIC NEUROSECRETORY CELLS (BNS-8206452); 24 MONTHS \$90,000
- EHRlich, YIGAL H. PATLACK, JOSEPH B. HENDLEY, EDITH D. AND PARSONS, RODNEY L. A MULTIPLE-COMPONENT SYSTEM FOR MULTISER STUDIES OF NEURONAL FUNCTION IN INTACT CELLS GROWN IN CULTURE (BNS-8209265); 12 MONTHS \$49,228

VIRGINIA

AMERICAN GEOLOGICAL INSTITUTE

- UNKLESBAY, A. G. TRAVEL OF UNITED STATES SCIENTISTS TO XITH CONGRESS OF INTERNATIONAL ASSOCIATION FOR QUATERNARY RESEARCH, MOSCOW, USSR, AUGUST 1-9, 1982 (04R-8206881*); 6 MONTHS \$1,000

COLLEGE OF WILLIAM AND MARY

- BRUSH, STEPHEN B. IPA MOBILITY ASSIGNMENT (STEPHEN B. BRUSH) (BNS-8021471 A01); 6 MONTHS \$1,661
- BRUSH, STEPHEN B. IPA MOBILITY ASSIGNMENT - STEPHEN B. BRUSH (BNS-8021471 A02); 4 MONTHS \$177

DEPARTMENT OF NAVY-OFFICE OF NAVAL RESEARCH

- POLLARD, JOSEPH P. SUPPORT FOR THE COMMITTEE ON VISION AND THE COMMITTEE ON HEARING, BIOACOUSTICS AND BIOMECHANICS OF THE NAS/NRC (BNS-7715827 A05); 12 MONTHS \$40,000

HAMPTON INSTITUTE

- ZEIDLER, JEANNE. CATALOGUING OF THE COLLEGE MUSEUM COLLECTIONS (BNS-8203958); 12 MONTHS \$3,200

UNIVERSITY OF VIRGINIA-SCHOOL OF MEDICINE

- HACKETT, JOHN T. LOCAL INTERACTIONS OF A LARGE VERTEBRATE INTERNEURON (BNS-8112742 A01); 12 MONTHS \$51,994

UNIVERSITY OF VIRGINIA

- STEWART, OSWALD. BEHAVIORAL RECOVERY AND POST-LESION NEURONAL PLASTICITY (BNS-8021865 A01); 12 MONTHS \$53,000
- BEST, PHILLIP J. THE HIPPOCAMPUS IN LEARNING AND SPATIAL BEHAVIOR (BNS-8119080); 24 MONTHS \$84,741
- SAPIR, J. DAVID, AND PIOT, CHARLES D. DOCTORAL DISSERTATION RESEARCH IN ANTHROPOLOGY (BNS-8200277); 24 MONTHS \$6,450
- WAGNER, ROY, AND DALTON, DOUGLAS M. DOCTORAL DISSERTATION RESEARCH IN ANTHROPOLOGY (BNS-8206317); 14 MONTHS \$7,695

VIRGINIA COMMONWEALTH UNIVERSITY-HEALTH SCIENCES DIVISION

- LEICHNETZ, GEORGE R. PREFRONTAL PROJECTIONS TO BRAINSTEM PRECULOMOTOR NUCLEI (BNS-8113387); 12 MONTHS \$50,000

VIRGINIA COMMONWEALTH UNIVERSITY

- MARTINEZ-CARRIO, MARINO. MOLECULAR BIOPHYSICS APPROACH TO SYNAPTIC RECEPTORS (BNS-8021183 A01); 12 MONTHS \$60,000
- STEIN, BARRY E. SUPERIOR COLLICULUS: ORGANIZATION OF SOMATIC CELLS (BNS-8021559 A01); 12 MONTHS \$51,043

VIRGINIA POLYTECHNIC INSTITUTE

- SCHWAB, WALTER E. INTERCELLULAR COMMUNICATION IN COELENTERATES (BNS-8004851 A02); 12 MONTHS \$30,556

WASHINGTON AND LEE UNIVERSITY

- JARRARD, LEONARD E. FUNCTIONAL DISSOCIATION WITHIN THE HIPPOCAMPAL FORMATION (BNS-8005735 A02); 12 MONTHS \$32,183

WASHINGTON

UNIVERSITY OF WASHINGTON-SCHOOL OF MEDICINE

- NATHANSON, NEIL M. INNERVATION AND DIFFERENTIATION OF THE HEART (BNS-8008664 A02); 12 MONTHS \$64,000
- BINDER, MARC D. CENTRAL ACTIONS OF MUSCLE AFFERENTS (BNS-8206223); 24 MONTHS \$88,000

UNIVERSITY OF WASHINGTON

- SCHWARTZKROIN, PHILIP A. LOCAL INTERACTIONS AMONG HIPPOCAMPAL NEURONS (BNS-7915115 A02); 12 MONTHS \$30,000
- ORLIANS, GORDON H. BIO-ECOLOGICAL DETERMINANTS OF BEHAVIOR (BNS-8004373 A01*); 24 MONTHS \$32,000
- ROHWER, SIEVERT A. DETERMINANTS OF RELIABILITY IN SIGNALS OF DOMINANCE STATUS (BNS-8008857 A01*); 12 MONTHS \$12,992
- CATTERALL, WILLIAM A. GENETIC ANALYSIS OF ELECTRICAL EXCITABILITY (BNS-8021619 A01); 12 MONTHS \$73,000

- KUHL, PATRICIA K. PERCEPTION OF COMPLEX AUDITORY SIGNALS IN PRIMATES: AN ANIMAL MODEL FOR COMMUNICATION PROCESSES AND THEIR DEVELOPMENT (BNS-8022492 A01); 12 MONTHS \$49,962
- BEECHER, MICHAEL D. MECHANISMS OF KIN RECOGNITION (BNS-8023562 A01); 12 MONTHS \$29,571

- KUHL, PATRICIA K. COMPLEX AUDITORY PERCEPTION AND AUDITORY-VOCAL LEARNING IN EARLY INFANCY (BNS-8103581 A01); 12 MONTHS \$49,876

- TELLER, DAVIDA Y. VISION IN HUMAN INFANTS (BNS-8111927); 12 MONTHS \$56,246

- PALKA, JOHN. INSECT NEURAL DEVELOPMENT (BNS-8204088); 12 MONTHS \$58,563

- LOFTUS, GEOFFREY R. PERCEPTION OF VISUAL MATERIAL (BNS-8209617); 15 MONTHS \$65,178

WASHINGTON STATE UNIVERSITY

- MOFFETT, STACIA B. INTEGRATION IN THE AUTONOMY REFLEX PATHWAY AND THE NEUROMUSCULAR ACTIVATION PATTERN (BNS-8022762 A01); \$7,272
- SHEPPARD, JOHN C. SUPPORT FOR RADIOCARBON DATING OF ARCHEOLOGICAL SAMPLES (BNS-8211261); 12 MONTHS \$74,781

WISCONSIN

CARDINAL STRITCH COLLEGE

- MYERSON, JOEL. OPERANT CHOICE: A SYSTEMS ANALYSIS APPROACH (BNS-8200710); 18 MONTHS \$14,423

UNIVERSITY OF WISCONSIN-MADISON-MEDICAL SCHOOL

- WELKER, WALLACE I. SOMATOSENSORY CIRCUITS OF THE CEREBELLUM (BNS-8022321 A01); 12 MONTHS \$73,345

UNIVERSITY OF WISCONSIN-MADISON

- BRUGGE, JOHN F. ORGANIZATION OF AUDITORY CORTEX (BNS-7912339 A02); 12 MONTHS \$79,973

- KUNG, CHING. ELECTROPHYSIOLOGY OF WILD-TYPE AND MUTANT PARAMECIUM (BNS-7918554 A02); 12 MONTHS \$63,691

- CASSIDY, FREDERIC G. DICTIONARY OF AMERICAN REGIONAL ENGLISH (BNS-7924032 A02); 12 MONTHS \$24,590

- HABERLY, LEWIS B. ULTRASTRUCTURAL ANALYSIS OF PHYSIOLOGICALLY CHARACTERIZED NEURONS IN THE PIRIFORM CORTEX (BNS-8012067 A02); 12 MONTHS \$37,000

- NELSON, DAVID L. THE ROLE OF LIPIDS IN MEMBRANE EXCITATION IN PARAMECIUM (BNS-8100632 A01); 12 MONTHS \$82,919

- MINEKA, SUSAN, AND GUNNAR, MEGAN. CONTROLLABILITY, DEVELOPMENT, AND SOCIAL SEPARATION (BNS-8119041); 18 MONTHS \$60,000

- PRICE, T. D. MESOLITHIC SETTLEMENT PATTERNS (BNS-8119043); 12 MONTHS \$34,978

- EBENHOLTZ, S. M. DETERMINANTS OF PERCEPTUAL ORIENTATION (BNS-8201411); 12 MONTHS \$45,462

- PRICE, T. D. BONE COMPOSITION AND DIET (BNS-8206415); 12 MONTHS \$25,206

- WELT, CAROL. STRUCTURAL-FUNCTIONAL STUDIES OF THE TRIGEMINAL GANGLION (BNS-8241215); 12 MONTHS \$40,045

UNIVERSITY OF WISCONSIN-MILWAUKEE

- WARREN, RICHARD M. PERCEPTION OF AUDITORY TEMPORAL PATTERNS (BNS-7912409 A02); 12 MONTHS \$40,000

- GOLDSTEIN, LYNNE, AND PETERS, LYNNE A. DOCTORAL DISSERTATION RESEARCH IN ANTHROPOLOGY (BNS-8200212); 18 MONTHS \$8,363

INFORMATION SCIENCE AND TECHNOLOGY

CALIFORNIA

CALIFORNIA INSTITUTE OF TECHNOLOGY

- WILDE, LOUIS L. AND SCHWARTZ, ALAN. INTERVENING IN MARKETS ON THE BASIS OF IMPERFECT INFORMATION: AN INFORMATION THEORETIC APPROACH (SES-8117708*); 18 MONTHS \$49,000

SRI INTERNATIONAL

- AMSLER, ROBERT A. EXPERIMENTAL RESEARCH ON KNOWLEDGE REPRESENTATIONS FOR LEXICAL DISAMBIGUATION OF FULL-TEXT SOURCES (INFORMATION SCIENCE) (IST-8208578); 24 MONTHS \$129,951

- WALKER, DONALD E. NATURAL LANGUAGE ACCESS TO TEXT (INFORMATION SCIENCE) (IST-8209346); 12 MONTHS \$88,032

STANFORD UNIVERSITY

- KNUTH, DONALD E. THEORETICAL BASIS FOR THE DEVELOPMENT OF DOCUMENT PREPARATION SYSTEMS (INFORMATION SCIENCE) (IST-8201226*); 12 MONTHS \$153,961

- PERRY, JOHN R. COMPUTATIONAL ASPECTS OF SITUATION SEMANTICS (COMPUTER RESEARCH) (MCS-8211902*); 24 MONTHS \$23,067

UNIVERSITY OF CALIFORNIA, BERKELEY

- WILNSKY, ROBERT. EVALUATING A KNOWLEDGE REPRESENTATION FOR PLANNING AND NATURAL LANGUAGE UNDERSTANDING (INFORMATION SCIENCE) (IST-8208602); 12 MONTHS \$73,184

UNIVERSITY OF CALIFORNIA, IRVINE

- KRAEMER, KENNETH L. LONGITUDINAL STUDY OF COMPUTER TECHNOLOGY AND IMPACTS IN CITIES (MCS-8115547*); 24 MONTHS \$65,572

- GRANGER, RICHARD H. AND MEEHAN, JAMES R. JUDGMENTAL INFERENCE IN UNDERSTANDING TEXTUAL INFORMATION (INFORMATION SCIENCE) (IST-8120685); 12 MONTHS \$64,158

UNIVERSITY OF CALIFORNIA, LOS ANGELES

PEARL, JUDEA; RESEARCH ON COMPUTER-BASED SYSTEMS FOR PROBLEM STRUCTURING (IST-8119045); 12 MONTHS \$77,806
 PEARL, JUDEA, AND DALKEY, NORMAN C; STUDIES IN THE ORGANIZATION OF INFORMATION STRUCTURES (IST-8201556); 18 MONTHS \$36,898

UNIVERSITY OF CALIFORNIA, SAN DIEGO

REICHMAN, RACHEL; DISCOURSE MODELS FOR EXTENDED PERSON-COMPUTER INTERACTION (IST-8120018); 24 MONTHS \$92,840

CONNECTICUT

YALE UNIVERSITY

SCHANK, ROGER C; INFORMATION MODELS FOR RECONSTRUCTIVE MEMORY AND LEARNING (IST-8120451); 12 MONTHS \$80,950

DISTRICT OF COLUMBIA

NATIONAL ACADEMY OF SCIENCES

CARTER, GESINA C; PARTIAL SUPPORT OF THE NUMERICAL DATA ADVISORY BOARD AND THE U.S. NATIONAL COMMITTEE FOR THE COMMITTEE ON DATA FOR SCIENCE AND TECHNOLOGY USSC/CODATA (IST-8118882); 12 MONTHS \$30,169

NATIONAL PLANNING ASSOCIATION

TERLECKYJ, NESTOR E; GROWTH OF THE COMMUNICATION SECTOR AND PRODUCTIVITY OF THE AMERICAN ECONOMY (IST-8119070); 12 MONTHS \$53,707

GEORGIA

GEORGIA STATE UNIVERSITY

HARRIS, SIDNEY E; ORGANIZATIONAL IMPACTS OF LOCAL INFORMATION NETWORK TECHNOLOGY (INFORMATION SCIENCE) (IST-8201445); 6 MONTHS \$47,119

ILLINOIS

NORTHWESTERN UNIVERSITY

SAARI, DONALD G; INFORMATION THEORY OF EQUILIBRIUM PROCESSES AND OF REGULATORY SYSTEMS (IST-8111122); 24 MONTHS \$46,592
 MILGROM, PAUL; ON THE ROLE OF INFORMATION IN A PRODUCTIVE ORGANIZATION (INFORMATION SCIENCE) (IST-8208600); 24 MONTHS \$38,822

UNIVERSITY OF ILLINOIS AT URBANA

WALTZ, DAVID L; UNDERSTANDING NATURAL LANGUAGE SCENE AND EVENT DESCRIPTIONS: COGNITIVE UNIVERSALS AND COMPUTER PROGRAMS BASED ON COMBINED AI AND LINGUISTICS METHODOLOGIES (IST-8117238); 36 MONTHS \$267,407

DEJONG, GERALD; EXPLANATORY SCHEMA ACQUISITION (IST-8120254); 24 MONTHS \$116,855

SMITH, LINDA C; DEVELOPMENT OF A TAXONOMY OF REPRESENTATIONS IN INFORMATION RETRIEVAL SYSTEM DESIGN (INFORMATION SCIENCE) (IST-8208576); 12 MONTHS \$29,960

UNIVERSITY OF ILLINOIS SYSTEM OFFICE

WILLIAMS, MARTHA E; COMPARATIVE ANALYSES OF ONLINE RETRIEVAL INTERFACES (INFORMATION SCIENCE) (IST-8209704); 30 MONTHS \$250,003

LOUISIANA

LOUISIANA STATE UNIVERSITY, BATON ROUGE

KRAFT, DONALD H; GROUP TRAVEL TO THE FIFTH INTERNATIONAL INFORMATION RETRIEVAL CONFERENCE: WEST BERLIN, MAY 1982 (IST-8122037); 6 MONTHS \$10,000

MARYLAND

UNIVERSITY OF MARYLAND, COLLEGE PARK

BRODIE, MICHAEL L; SYMPOSIUM ON CONCEPTUAL MODELLING: PERSPECTIVES FROM ARTIFICIAL INTELLIGENCE, DATABASES AND PROGRAMMING LANGUAGES: MAY 26-28, 1982, COLLEGE PARK, MARYLAND (IST-8116809); 12 MONTHS \$40,339

MASSACHUSETTS

BOSTON UNIVERSITY

DELANEY, MICHAEL F; REPRESENTATION AND UTILIZATION OF NON-TEXTUAL (CHEMICAL SPECTRAL) INFORMATION (IST-8120255); 12 MONTHS \$33,000

SALVETER, SHARON C; VERBS IN DATABASES (INFORMATION SCIENCE) (IST-8214622); 24 MONTHS \$129,960

BRANDEIS UNIVERSITY

JACKENDOFF, RAY, AND GRIMSHAW, JANE; INFORMATION STRUCTURE OF A NATURAL LANGUAGE LEXICON (IST-8130403); 12 MONTHS \$24,238

JACKENDOFF, RAY, AND GRIMSHAW, JANE; INFORMATION STRUCTURE OF A NATURAL LANGUAGE LEXICON (INFORMATION SCIENCE) (IST-8120403 A01); \$20,809

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

RICHARDS, WHITMAN A; NATURAL COMPUTATION AND CONTROL (COMPUTER RESEARCH) (28S-7923110 A02*); 12 MONTHS \$130,000

KLATT, DENNIS H; AUDITORY INFORMATION PROCESSING AND SPEECH PERCEPTION (IST-8017539 A01); 18 MONTHS \$132,500

ULLMAN, SHIMON, AND VAINA, LUCIA; A FUNCTIONAL REPRESENTATION OF VISUAL INFORMATION (INFORMATION SCIENCE) (IST-8116549); 26 MONTHS \$151,183

REINTJES, J FRANCIS; ADVANCED TECHNOLOGIES FOR ELECTRONIC TRANSFER OF TEXT AND GRAPHICS (INFORMATION SCIENCE) (IST-8122080*); 24 MONTHS \$149,545

MARCUS, RICHARD S; INVESTIGATION OF MODELS FOR ENHANCED INFORMATION RETRIEVAL THROUGH COMPUTER-MEDIATED ASSISTANCE (IST-8201842); 12 MONTHS \$97,445

DE SOLA POOL, ITHIEL; A WORKSHOP ON MEASUREMENT OF COMMUNICATIONS AND INFORMATION (INFORMATION SCIENCE), SUMMER OF 1982, CAMBRIDGE, MASSACHUSETTS (IST-8207403); 3 MONTHS \$29,326

UNIVERSITY OF MASSACHUSETTS, AMHERST

CROFT, W. BRUCE; A FRAMEWORK FOR USER-ORIENTED ADAPTIVE DOCUMENT RETRIEVAL SYSTEMS (IST-8111108); 24 MONTHS \$121,240

RISLAND, EDWINA L; CONFERENCE ON INTELLIGENT USER INTERFACES: OCTOBER 19-22, 1982; WOODSTOCK, VERMONT (INFORMATION SCIENCES) (IST-8212238); 12 MONTHS \$28,818

MICHIGAN

UNIVERSITY OF MICHIGAN-ANN ARBOR

BLUME, LAWRENCE E; THE DEMAND FOR INFORMATION BY RATIONAL AGENTS AND THE MARKET FOR INFORMATION (IST-8120315*); 24 MONTHS \$54,645

MINNESOTA

UNIVERSITY OF MINNESOTA

HURWICZ, LEONID; COMPARISON AND ANALYSIS OF SYSTEMS AND TECHNIQUES OF ECONOMIC ORGANIZATIONS (SES-8208378*); 12 MONTHS \$19,190

ETTEMA, JAMES; THE HOME INFORMATION UTILITY: INDIVIDUAL-LEVEL BASIS OF SOCIETAL-LEVEL IMPACT (INFORMATION SCIENCE) (IST-8212164*); 9 MONTHS \$54,403

NEW JERSEY

PRINCETON UNIVERSITY

BAUMOL, WILLIAM J; PRODUCTIVITY GROWTH AND SCIENTIFIC AND TECHNICAL INFORMATION (INFORMATION SCIENCE) (IST-8200989); 24 MONTHS \$128,259

SHAPIRO, CARL; SIGNALS OF PRODUCT QUALITY (SES-8207377*); 24 MONTHS \$8,000

RUTGERS UNIVERSITY-BUSCH CAMPUS

SCHMIDT, CHARLES; INFORMATION PROCESSING ANALYSIS OF HUMAN UNDERSTANDING OF ACTION SEQUENCES AND COMPUTATIONAL TRACES (INFORMATION SCIENCE) (IST-8119889); 12 MONTHS \$91,885

NEW YORK

COLUMBIA UNIVERSITY

PARSONS, CHARLES D. AND LEVI, ISAAC; TEXT CONSTRUCTED FROM INFORMATIONAL UNITS (IST-8114421); 20 MONTHS \$265,986

NOAM, ELI M; TECHNICAL INNOVATION IN ESTABLISHED CABLE TELEVISION SYSTEMS IN COMPARISON WITH DEVELOPMENTS IN THE STATE OF THE ART (INFORMATION SCIENCE) (IST-8209465); 9 MONTHS \$9,378

NEW YORK UNIVERSITY

ELTON, MARTIN C; BEHAVIORAL RESEARCH ON BROADCAST TELETEXT (INFORMATION SCIENCE) (IST-7924889 A04); 5 MONTHS \$59,910

MACHLUP, FRITZ; INFORMATION SCIENCE: AN ANALYSIS OF METHODOLOGICAL ISSUES AND INTERDISCIPLINARY RELATIONSHIPS (IST-8008007 A02); 6 MONTHS \$18,820

LANGLOIS, RICHARD N; INFORMATION SCIENCES AND ECONOMIC THEORY (IST-8110537); 12 MONTHS \$38,609

SAGER, NAOMI; COMPUTABLE MODELS OF TIME AND QUANTITY IN NATURAL LANGUAGE DATA (IST-8115669 A01); \$110,818

FALMAGNE, JEAN-CLAU; ASSESSMENT AND MEASUREMENT OF KNOWLEDGE - THEORY AND ALGORITHMS (IST-8117057); 30 MONTHS \$193,839

OLSON, MARGRETHE H; PILOT TESTING OF DISTRIBUTED WORK ENVIRONMENT ORGANIZATION AND TECHNOLOGY (INFORMATION SCIENCE) (IST-8208451); 3 MONTHS \$18,648

STATE UNIVERSITY AT STONY BROOK

JONES, MARK A; INDUCING LEXICAL DEFINITIONS FOR WORD-BASED PARSERS (IST-8208113); 24 MONTHS \$74,757

UNIVERSITY OF ROCHESTER

SMALL, STEVEN L; DISTRIBUTED INFORMATION PROCESSING MODELS OF LANGUAGE INTERPRETATION (INFORMATION SCIENCE) (IST-8208571); 24 MONTHS \$113,606

ALLEN, JAMES F; EXTENDED USER-SYSTEM DIALOGUES FOR COMPLEX INFORMATION RETRIEVAL (INFORMATION SCIENCE) (IST-8210564); 24 MONTHS \$199,930

NORTH CAROLINA

DUKE UNIVERSITY

BIERMANN, ALAN W; VOICE INTERACTIVE COMPUTER SYSTEMS (MCS-8113491*); 12 MONTHS \$54,000

NORTH CAROLINA STATE UNIVERSITY AT RALEIGH

RODMAN, ROBERT D; VOICE INTERACTIVE COMPUTER SYSTEMS (MCS-8114206*); 12 MONTHS \$16,500

OHIO

BATTELLE MEMORIAL INSTITUTE

NIEHOFF, ROBERT T; *THE IMPACT OF SUBJECT SWITCHING--AN ASSESSMENT* (IST-8111497); 16 MONTHS \$144,000

OHIO STATE UNIVERSITY

JENSEN, RICHARD A; *INFORMATIONAL ASPECTS OF THE ADOPTION AND DIFFUSION OF INNOVATION* (INFORMATION SCIENCE) (IST-8208607); 15 MONTHS \$39,771

PENNSYLVANIA

CARNEGIE-MELLON UNIVERSITY

MORGAN, M GRANGER; *EXPERIMENTAL ANALYSIS OF FACTORS IN THE DESIGN OF INFORMATION SYSTEMS FOR MODELLING ENGINEERING/ECONOMIC DECISIONS* (IST-8112439 A01); \$8,723

SPATT, CHESTER; *MODELS OF INFORMATION IN INDUSTRIAL ORGANIZATION* (INFORMATION SCIENCE) (IST-8208575*); 12 MONTHS \$25,000

KIESLER, SARA B; *COMPUTER-MEDIATED COMMUNICATION* (INFORMATION SCIENCE) (IST-8210701*); 24 MONTHS \$149,923

PENNSYLVANIA STATE UNIVERSITY

JURS, PETER C; *COMPUTER ASSISTED STUDIES OF STRUCTURE-PROPERTY RELATIONSHIPS* (CHE-8202630*); 12 MONTHS \$11,500

ST JOSEPH'S UNIVERSITY

BANERJI, RANAN B; *FLEXIBILITY AND EFFICIENCY OF KNOWLEDGE REPRESENTATION IN INTELLIGENT INFORMATION SYSTEMS* (MCS-8217964*); 12 MONTHS \$29,444

UNIVERSITY OF PENNSYLVANIA

FININ, TIMOTHY W; *A KNOWLEDGE BASED APPROACH TO INTELLIGENT INTERACTIVE HELP SYSTEMS* (IST-8130252); 24 MONTHS \$99,544

SAPPINGTON, DAVID; *OPTIMAL INCENTIVE SCHEMES UNDER ASYMMETRIC INFORMATION* (INFORMATION SCIENCE) (IST-8215300*); 12 MONTHS \$25,655

RHODE ISLAND

BROWN UNIVERSITY

ANDERSON, JAMES A; *COGNITIVE APPLICATIONS OF MATRIX MEMORY MODELS* (BNS-7923000 A02*); 12 MONTHS \$13,045

TEXAS

SOUTHERN METHODIST UNIVERSITY

EASTMAN, CAROLINE M; *PERFORMANCE OF MULT-KEY INFORMATION SEARCH ALGORITHMS* (INFORMATION SCIENCE) (IST-8214611); 12 MONTHS \$17,644

UNIV OF TEXAS AT AUSTIN

SIMMONS, ROBERT F; *QUERY LOGIC FOR A TEXT-KNOWLEDGE BASE* (INFORMATION SCIENCE) (IST-8200976); 24 MONTHS \$70,693

VIRGINIA

UNIVERSITY OF VERMONT

HEGNER, STEPHEN J; *REPRESENTATION OF INFORMATION AND EASE OF UPDATE: A GENERAL THEORY OF RELATIONAL DATA BASE*

NORMALIZATION (INFORMATION SCIENCE) (IST-8212178); 24 MONTHS \$25,162

WASHINGTON

UNIVERSITY OF WASHINGTON

RITCHIE, ROBERT W; *TOWARD AUTOMATED NATURAL LANGUAGE PROCESSING: PHRASE LINKING GRAMMARS FOR SYNTAX AND SEMANTICS* (INFORMATION SCIENCE) (IST-8118393*); 12 MONTHS \$70,538

WISCONSIN

UNIVERSITY OF WISCONSIN-MADISON

BARWISE, K JON; *COMPUTATIONAL ASPECTS OF SITUATION SEMANTICS* (COMPUTER RESEARCH) (MCS-8201940*); 24 MONTHS \$17,536

REGIONAL INSTRUMENTATION FACILITIES (BBS)

ARIZONA

ARIZONA STATE UNIVERSITY

COWLEY, JOHN M, BUSECK, PETER R, EYRING, LEROY, AND SPENCE, JOHN C; *REGIONAL INSTRUMENTATION FACILITY FOR HIGH RESOLUTION ELECTRON MICROSCOPY* (CHE-7916098 A03*); 12 MONTHS \$183,378

CALIFORNIA

UNIVERSITY OF CALIFORNIA, BERKELEY

LEE, YUAN T, AND MOORE, C BRADLEY; *SAN FRANCISCO LASER CENTER* (CHEMISTRY) (CHE-7916250 A03*); 8 MONTHS \$226,622

CONNECTICUT

YALE UNIVERSITY

PRESTEGARD, JAMES H, ARMITAGE, IAN M, CROTHERS, DONALD M, FALLER, J W, AND SAUNDERS, MARTIN; *NORTHEAST REGIONAL NMR FACILITY* (CHE-7916210 A03*); 3 MONTHS \$72,000

MASSACHUSETTS

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

FELD, MICHAEL S; *REGIONAL INSTRUMENTATION FACILITY FOR LASER SPECTROSCOPY AND DYNAMICS* (CHEMISTRY) (CHE-7818580 A03*); 12 MONTHS \$16,000

OTHER

MARYLAND

CAPITAL SYSTEMS GROUP INC

CLANSKY, KENNETH B; *PROCESSING SUMMARIES OF RESEARCH PROJECTS* (BBS-8217298*); 12 MONTHS \$16,000

CONSOLIDATED VISUAL CENTER

NORRIS, THOMAS R; *GRAPHIC ARTS SERVICES* (PRM-8122157 A01); \$10,000

ASTRONOMICAL, ATMOSPHERIC, EARTH AND OCEAN SCIENCES

ATMOSPHERIC SCIENCES

ALABAMA

UNIVERSITY OF ALABAMA IN HUNTSVILLE

EMSLIE, A G; THE RESPONSE OF THE SOLAR ATMOSPHERE TO FLARE ENERGY RELEASE (ATM-8200934); 12 MONTHS \$30,000

ALASKA

UNIVERSITY OF ALASKA FAIRBANKS CAMPUS-GEOPHYSICAL INSTITUTE

ROMICK, GERALD J, AND AKASOFU, SYUN-ICHI; OPERATION OF THE ALASKA-CANADA HIGH LATITUDE MAGNETOMETER CHAIN OF STATIONS (ATM-8010807 A01); 12 MONTHS \$76,200

HUNSUCKER, ROBERT D; CONTINUED SUPPORT SERVICES FOR USERS OF THE CHATANIKA INCOHERENT SCATTER RADAR (ATM-8011952 A01); 12 MONTHS \$35,600

ROMICK, GERALD J, AND SIVJEE, GULAMABAS G; ANALYSIS OF IMS MERIDIAN SCANNING PHOTOMETER DATA WITH RESPECT TO MAGNETOSPHERIC ACTIVITY (ATM-8012711 A01); 12 MONTHS \$60,000

DEEHR, CHARLES S, AND ROMICK, GERALD J; OPTICAL STUDIES OF THE MAGNETOSPHERIC CUSP FROM WEST SPITSBERGEN (ATM-8012719 A01); 12 MONTHS \$89,000

REES, MANFRED H, AND ROMICK, GERALD J; THERMOSPHERIC NEUTRAL WINDS AND TEMPERATURE (ATM-8015320 A01); 12 MONTHS \$68,000

HALLINAN, THOMAS J, AND STENBAEK-NIELSE, H C; ADVANCES IN THE USE OF STEREO TV IMAGING FOR AURORAL RESEARCH (ATM-8019445 A02); 12 MONTHS \$90,000

JAYAWERA, KOLF, AND STAMNES, KNUT; SCATTERING OF LIGHT FROM ATMOSPHERIC ICE CRYSTALS (ATM-8105065); 12 MONTHS \$107,800

AKASOFU, SYUN-ICHI; A STUDY OF MAGNETIC AND AURORAL DATA FROM THE IMS ALASKA MERIDIAN CHAIN OBSERVATORIES (ATM-8108994 A01*); 12 MONTHS \$105,700

WATKINS, BRENTON J, AND JAYAWERA, KOLF; DUAL RADAR OBSERVATIONS OF TURBULENCE IN THE UPPER TROPOSPHERE AND LOWER STRATOSPHERE (ATM-8111132 A01*); 12 MONTHS \$73,800

AKASOFU, SYUN-ICHI; A STUDY OF MAGNETOSPHERIC SUBSTORMS (ATM-8115321 A01); 12 MONTHS \$156,300

LEE, LOU-CHUAN; A THEORETICAL STUDY OF THE ENERGY TRANSFER PROCESS AT THE OPEN MAGNETOPAUSE AND THE NONLINEAR WAVE STRUCTURE ON AURORAL FIELD LINES (ATM-8116045); 12 MONTHS \$32,500

LEE, LOU-CHUAN; A THEORETICAL STUDY OF THE ENERGY TRANSFER PROCESS AT THE OPEN MAGNETOPAUSE AND THE NONLINEAR WAVE STRUCTURE ON AURORAL FIELD LINES (ATM-8116045 A01); \$5,100

BROWN, NEAL B; MEASUREMENTS AND COMPARISONS OF METEOROLOGICAL DATA IN THE MIDDLE ATMOSPHERE (ATM-8118194 A01*); 12 MONTHS \$50,800

SWIFT, DANIEL W; NUMERICAL SIMULATION OF AURORAL AND MAGNETOSPHERIC PROCESSES (ATM-8119861); 24 MONTHS \$110,000

KAN, JOSEPH R; A STUDY OF SOLAR WIND-MAGNETOSPHERE-IONOSPHERE INTERACTIONS (ATM-8120329); 12 MONTHS \$99,800

ROMICK, GERALD J, AND REES, MANFRED H; STUDIES OF METASTABLE NEUTRAL AND ION SPECIES IN THE HIGH ALTITUDE CUSP, POLAR CAP AND LONG-RAYED AURORAS (ATM-8300114); 12 MONTHS \$65,000

UNIVERSITY OF ALASKA FAIRBANKS CAMPUS

REES, MANFRED H; EXPERIMENTAL AND THEORETICAL RESEARCH ON THE AURORA BOREALIS (ATM-7923266 A02); 12 MONTHS \$95,000

ARIZONA

ARIZONA STATE UNIVERSITY

BUSECK, PETER R; QUANTITATIVE ANALYSES OF INDIVIDUAL AIRBORNE MICROPARTICLES USING ELECTRON BEAM TECHNIQUES (ATM-8022849 A01); 12 MONTHS \$191,920

LIGHTNING LOCATION & PROTECTION INC

MAIER, MICHAEL W; REGIONAL VARIATIONS IN THE SPATIAL AND TEMPORAL PROPERTIES OF CLOUD-TO-GROUND LIGHTNING (ATM-8111461 A01); 12 MONTHS \$32,100

UNIVERSITY OF ARIZONA

STOCKTON, CHARLES W; PROJECTED EFFECTS OF CLIMATIC VARIATION UPON WATER AVAILABILITY IN WESTERN UNITED STATES (ATM-7924365 A02); 12 MONTHS \$107,100

HERMAN, BENJAMIN M, REAGAN, JOHN A, AND SCHOTLAND, RICHARD M; PROPERTIES AND RADIATION EFFECTS OF ATMOSPHERIC AEROSOLS (ATM-8012906 A01); 12 MONTHS \$127,000

TWOMEY, SEAN A; RADIATIVE PROPERTIES OF STRATIFORM CLOUD LAYERS (ATM-8017024 A01); 12 MONTHS \$24,350

FRITTS, HAROLD C; TREE-RING CHRONOLOGY DEVELOPMENT IN NORTH AMERICA WITH EMPHASIS IN CALIFORNIA AND OREGON (ATM-8026732 A01); 12 MONTHS \$89,000

GALL, ROBERT L, AND STALEY, DEAN O; THEORETICAL AND NUMERICAL STUDIES OF INTERNAL TORNADO DYNAMICS (ATM-8115554); 12 MONTHS \$45,400

FRITTS, HAROLD C; AN EXAMINATION OF THE POSSIBLE CAUSES OF CLIMATIC VARIATIONS REVEALED IN WELL-VERIFIED DENDROCLIMATIC RECONSTRUCTIONS FOR NORTH AMERICA AND THE NORTH PACIFIC (ATM-8115754); 12 MONTHS \$130,001

LEVY, E H, AND JOKIPIL, JACK R; THEORETICAL STUDIES OF INTERPLANETARY MAGNETIC FIELDS, TURBULENCE, AND COSMIC RAYS (ATM-8119050); 12 MONTHS \$68,500

SELLERS, WILLIAM D; CLIMATE MODELING AND DIAGNOSTIC RESEARCH (ATM-8203509); 12 MONTHS \$76,500

GALL, ROBERT L; THE EFFECTS OF OROGRAPHY OF PLANETARY WAVES IN THE ATMOSPHERE (ATM-8205349*); 12 MONTHS \$26,600

ARKANSAS

UNIVERSITY OF ARKANSAS FAYETTEVILLE

RICHARDSON, CHARLES B; A LABORATORY STUDY OF SULFATE AEROSOLS USING ELECTRODYNAMIC SUSPENSION (ATM-7916588 A01); 24 MONTHS \$105,800

STAHLE, DAVID W, AND HEHR, JOHN G; TREE-RING CHRONOLOGY DEVELOPMENT IN THE SOUTHCENTRAL UNITED STATES (ATM-8120615); 12 MONTHS \$60,900

KURODA, PAUL K; ATMOSPHERIC RADIOCHEMISTRY (ATM-8206718); 12 MONTHS \$77,500

BERMUDA

BERMUDA BIOLOGICAL STATION FOR RESEARCH INC

KNAP, ANTHONY H, AND WRIGHT, WILLIAM R; PANULIRUS HYDROGRAPHIC STATIONS (OCE-8116410*); 12 MONTHS \$11,750

CALIFORNIA

AEROSPACE CORPORATION

KOONS, HARRY C; COORDINATION AND ANALYSIS OF SCATHA VLF DATA (ATM-8019060 A01); 12 MONTHS \$70,500

NEWMAN, ALICE L; NUMERICAL SIMULATION OF F-REGION SHORT-SCALE IRREGULARITIES PRODUCED BY IONOSPHERIC MODIFICATION EXPERIMENTS (ATM-8209639); 12 MONTHS \$37,300

CALIFORNIA INSTITUTE OF TECHNOLOGY

EPSTEIN, SAMUEL; CLIMATIC IMPLICATIONS OF THE D/H, 18C/19C, 18O/16O IN TREE RINGS (ATM-8018830 A01); 12 MONTHS \$139,300

ZIRIN, HAROLD; RADIO OBSERVATIONS OF THE SUN AT CENTIMETER AND MILLIMETER WAVELENGTHS (ATM-8108449 A01); 12 MONTHS \$142,000

ZIRIN, HAROLD; STUDIES OF SOLAR AND STELLAR ACTIVITY (ATM-8112698); 12 MONTHS \$165,000

KREISS, HEINZ O; THE IMPROVEMENT OF NUMERICAL METHODS FOR ATMOSPHERIC MODELS (ATM-8201307); 12 MONTHS \$36,300

ZIRIN, HAROLD; COMPLETION OF THE FREQUENCY AGILE INTERFEROMETER SYSTEM FOR MICROWAVE SPECTROSCOPY OF SOLAR FLARES AND ACTIVE REGIONS (ATM-8207381); 6 MONTHS \$8,200

LA JOLLA INSTITUTE

WEST, BRUCE J, AND HOLLOWAY, GREG; WORKSHOP ON: THE PREDICTABILITY OF FLUID MOTIONS (ATM-8207671); 12 MONTHS \$31,800

LAWRENCE BERKELEY LABORATORY

NOVAKOV, TIHOMIR; DETERMINATION OF NON-AMMONIUM REDUCED NITROGEN AND ITS ROLE IN LINKING INORGANIC SPECIES WITH CARBONACEOUS PARTICLES (ATM-8310343); 12 MONTHS \$100,000

LOCKHEED MISSILES AND SPACE COMPANY INC-LOCKHEED PALO

ALTO RESEARCH LABORATORY

MEUDE, STEPHEN B; MERIDIAN PHOTOMETER CHAIN DATE REDUCTION (ATM-8015673 A01); 12 MONTHS \$46,000

SHARP, RICHARD D; IONOSPHERIC ACCELERATION MECHANISMS (ATM-8119340); 12 MONTHS \$82,000

NAVAL POSTGRADUATE SCHOOL

CHANG, CHIH-PEI, AND WILLIAMS, ROGER T; TROPICAL AND MONSOON STUDIES (ATM-8013153 A02; 12 MONTHS \$78,700)

RAND CORPORATION

DEIRMENDJIAN, DIRAN; THE USE OF ELECTROMAGNETIC (INFRARED THROUGH MILLIMETER) WAVE SCATTERING TECHNIQUES IN CLOUD AND RAIN MICROPHYSICS RESEARCH (ATM-7925343 A01; 12 MONTHS \$57,600)

MURRAY, FRANCIS W; INVESTIGATION OF THE RELATION BETWEEN CLOUD MICROPHYSICS AND (ATM-8102270*; 12 MONTHS \$46,700)

SAN DIEGO STATE UNIVERSITY

LEE, LONG C; CHARACTERIZATION OF AITKEN AEROSOL PARTICLES BY OPTICAL EXCITATION (ATM-8303948; 12 MONTHS \$81,450)

LEE, LONG C; EMISSIONS FROM PHOTOFRAGMENTS OF ATMOSPHERIC RADICALS AND MOLECULES (ATM-8205849; 6 MONTHS \$37,439)

LEE, LONG C; EMISSIONS FROM PHOTOFRAGMENTS OF ATMOSPHERIC RADICALS AND MOLECULES (ATM-8205849 A01; 12 MONTHS \$91,900)

SRI INTERNATIONAL

BARON, MURRAY J, AND VONDRAK, R R; CHATANIKA INCOHERENT-SCATTER RADAR FACILITY OPERATION AND COORDINATION (ATM-7823653 A04; 12 MONTHS \$300,000)

KELLY, JOHN D, AND BARON, MURRAY J; COMPLETION OF CHATANIKA INCOHERENT-SCATTER RADAR FACILITY OPERATION AND COORDINATION (ATM-7823653 A05; 9 MONTHS \$220,000)

SAXON, ROBERTA F; COLLISION SPECTROSCOPY IN DIATOMIC SYSTEMS (ATM-7825406 A03*; 12 MONTHS \$52,000)

BLACK, GRAHAM; PHOTOCHEMISTRY AND KINETICS OF STRATOSPHERIC SULPHUR SPECIES (ATM-8011283 A01; 12 MONTHS \$61,300)

RINO, CHARLES L; GLOBAL CHARACTERIZATION FOR IONOSPHERIC F-REGION IRREGULARITIES (AERONOMY) (ATM-8024129 A01; 12 MONTHS \$70,000)

KELLY, JOHN D; RELOCATION OF THE INCOHERENT-SCATTER RADAR FROM CHATANIKA, ALASKA TO A VERY HIGH GEOMAGNETIC LATITUDE (ATM-8024889 A02; 12 MONTHS \$218,400)

TALLMADGE, GENE E; PROPOSAL TO UPGRADE THE JICAMARCA RADIO OBSERVATORY 50MHZ TRANSMITTER (29M-8025353 A01*; 12 MONTHS \$148,000)

SLANGER, TOM G; PROBLEMS IN PHOTODISSOCIATION AND KINETICS INVOLVING AERONOMICALLY IMPORTANT METASTABLE ATOMS AND MOLECULES (ATM-8116308; 12 MONTHS \$74,800)

STANFORD UNIVERSITY

HELLIWELL, ROBERT A; STUDIES OF MAGNETOSPHERE-IONOSPHERE-ATMOSPHERE INTERACTIONS (ATM-8018248 A01; 12 MONTHS \$92,600)

WILCOX, JOHN M; DYNAMIC OBSERVATIONS SOLAR MAGNETIC AND VELOCITY FIELDS (ATM-8020421 A01; 12 MONTHS \$144,600)

PETROSIAN, VAHE; INTERACTION OF HIGH ENERGY ELECTRONS WITH SOLAR FLARE PLASMAS AND MICROWAVE RADIATION (ATM-8116989; 12 MONTHS \$40,000)

UNIVERSITY OF CALIFORNIA, BERKELEY

HUDSON, MARY K; A THEORETICAL AND NUMERICAL STUDY OF SMALL AMPLITUDE NONLINEAR WAVES AND THEIR TEMPORAL EVOLUTION IN THE AURORAL PLASMA (ATM-8103347 A01; 12 MONTHS \$57,200)

LIN, ROBERT P; HIGH RESOLUTION X- AND GAMMA - RAY SPECTROSCOPY OF SOLAR FLARES (ATM-8119543; 12 MONTHS \$50,000)

UNIVERSITY OF CALIFORNIA, DAVIS

WEARE, BRYAN C; DIAGNOSTIC STUDIES OF THE POSSIBLE ATMOSPHERIC RESPONSES TO EL NINO (ATM-8017049 A01; 12 MONTHS \$46,720)

UNIVERSITY OF CALIFORNIA, IRVINE

MOLINA, MARIO J; CHARACTERIZATION OF ATMOSPHERICALLY IMPORTANT CHEMICAL REACTION MECHANISMS THROUGH INFRARED SPECTROSCOPY (ATM-8106136 A01; 12 MONTHS \$62,600)

VAN HOVEN, GERARD; MAGNETIC STRUCTURES AND FIELD RECONNECTION: MECHANISMS OF SOLAR-TERRESTRIAL ACTIVITY (ATM-8209611; 12 MONTHS \$54,700)

UNIVERSITY OF CALIFORNIA, LOS ANGELES

ARAKAWA, AKIO, AND SUAREZ, MAX J; NUMERICAL MODELING OF THE GLOBAL ATMOSPHERE (29M-7801922 A05*; 12 MONTHS \$198,300)

KIVELSON, MARGARET G, AND SOUTHWOOD, DAVID J; A STUDY OF MAGNETOSPHERIC HYDROMAGNETICS (ATM-7923586 A02; 12 MONTHS \$75,000)

DE NIRO, MICHAEL J; ANALYSIS OF BIOLOGICAL PROCESSES WHICH AFFECT CLIMATIC RECONSTRUCTION BASED ON STABLE ISOTOPE RATIOS OF TREE RINGS (ATM-7924591 A02*; 12 MONTHS \$65,200)

DAWSON, JOHN M, AND KENNEL, CHARLES F; NUMERICAL STUDIES OF MAGNETOHYDRODYNAMICS PROCESSES IN SPACE (ATM-7926492 A02; 12 MONTHS \$114,800)

FRIEDLANDER, SHELDON K, GIFFIN, CHARLES E, SINHA, MAHADEVA P, AND VILKER, VINCENT L; PARTICLE ANALYSIS BY MASS SPECTROMETRY (PAMS) (CPE-8008686 A01*; 12 MONTHS \$30,000)

MCPHERSON, ROBERT L; CONTROL OF SUBSTORM AND STORM ACTIVITY BY THE SOLAR WIND AND INTERNAL MAGNETOSPHERIC PROCESSES (ATM-8020376 A01; 12 MONTHS \$61,200)

PRUPPACHER, HANS R; A WIND TUNNEL INVESTIGATION OF MICROPHYSICAL PROCESSES IN ATMOSPHERIC CLOUDS AT TEMPERATURES ABOVE AND BELOW 0°C (ATM-8115121; 12 MONTHS \$92,400)

CORONITI, FERDINAND V; MAGNETOSPHERIC AND SPACE PLASMA PHYSICS (ATM-8119544; 12 MONTHS \$142,000)

STENZEL, REINER L, AND GEKELMAN, WALTER; DYNAMICS OF CURRENT SHEETS DURING MAGNETIC FIELD LINE RECONNECTION (ATM-8119717; 12 MONTHS \$80,000)

SISCOE, GEORGE L; TAIL BOUNDARY WAVES AND THE ROLE OF BIRKELAND CURRENTS IN MAGNETOSPHERIC DYNAMICS (ATM-8120453; 12 MONTHS \$68,600)

KIVELSON, MARGARET G, AND DUNGEY, JAMES W; A THEORETICAL STUDY OF GYROPHASE DEPENDENCE OF VELOCITY DISTRIBUTIONS (ATM-8203544; 6 MONTHS \$15,600)

YANAI, MICHIO; INVESTIGATION OF TROPICAL MOTION SYSTEMS (29M-8204086*; 12 MONTHS \$57,116)

UNIVERSITY OF CALIFORNIA, RIVERSIDE

WHITE, R STEPHEN, AND BAUM, PETER J; A LABORATORY SIMULATION OF MAGNETOSPHERE RECONNECTION AND DYNAMICS (ATM-8018315 A01; 12 MONTHS \$112,900)

PITTS, JAMES N, AND ATKINSON, ROGER; THE ROLE OF TRACE ORGANICS AND RADICALS IN CHEMICAL CYCLES IN THE TROPOSPHERE (ATM-8309028; 12 MONTHS \$150,000)

UNIVERSITY OF CALIFORNIA, SAN DIEGO-SCRIPPS INSTITUTION OF OCEANOGRAPHY

BARNETT, TIM P; STUDY OF PREDICTABILITY AND VARIABILITY OF THE NORTHERN HEMISPHERE CLIMATE (ATM-7918206 A02; 12 MONTHS \$219,260)

NAMIAS, JEROME; LARGE SCALE AIR-SEA INTERACTIONS OVER THE NORTHERN HEMISPHERE AND ASSOCIATED IMPACT ON SHORT-TERM CLIMATE (ATM-8118115; 12 MONTHS \$130,000)

NAMIAS, JEROME; LARGE SCALE AIR-SEA INTERACTIONS OVER THE NORTHERN HEMISPHERE AND ASSOCIATED IMPACT ON SHORT-TERM CLIMATE (ATM-8118115 A01; \$5,061)

WEISS, RAY F; TRACE GASES IN THE OCEAN AND ATMOSPHERE (OCE-8119579*; 12 MONTHS \$35,000)

SOMERVILLE, RICHARD C; THE EFFECTS OF OROGRAPHY ON PLANETARY WAVES IN THE ATMOSPHERE (ATM-8205392*; 12 MONTHS \$26,600)

UNIVERSITY OF CALIFORNIA, SAN DIEGO

ALFVEN, HANNES, AND THOMPSON, WILLIAM B; THE ELECTRIC CURRENT STRUCTURE OF THE MAGNETOSPHERE AND HELIOSPHERE (ATM-8109566 A01; 12 MONTHS \$63,700)

CANFIELD, RICHARD C; SOLAR FLARE RADIATIVE HYDRODYNAMICS (ATM-8112866 A01; 6 MONTHS \$41,200)

WHIPPLE, ELDEN C; PLASMAS IN MAGNETIC NEUTRAL REGIONS (ATM-8115091; 12 MONTHS \$35,000)

HUDSON, HUGH S; PRECISE MEASUREMENT OF SUNSPOT EFFECTS ON TOTAL SOLAR IRRADIANCE (ATM-8117355; 12 MONTHS \$25,000)

GAUTIER, CATHERINE; SATELLITE ESTIMATIONS OF LARGE-SCALE INSULATION OVER THE TROPICAL OCEANS (29M-8205817; 12 MONTHS \$46,505)

RICKETT, BARNEY J, COLES, WILLIAM A, AND RUMSEY, VICTOR H; RADIOWAVE DIAGNOSTIC STUDIES OF THE EARTH'S PLASMA ENVIRONMENT (ATM-8209603*; 12 MONTHS \$120,700)

UNIVERSITY OF CALIFORNIA, SANTA BARBARA

RINKER, ROBERT G, AND HILL, ROBERT D; PRODUCTION OF TRACE GASES IN THE ATMOSPHERE BY ELECTRICAL CORONAS (ATM-8100164*; 12 MONTHS \$56,500)

COLORADO

COLORADO COLLEGE

HUEBERT, BARRY J; ATMOSPHERIC ACIDITY: THE DRY DEPOSITION OF NITRIC ACID VAPOR (ATM-8120762; 12 MONTHS \$74,100)

COLORADO SCHOOL OF MINES

VOORHEES, KENT J; CHARACTERIZATION OF THE INSOLUBLE ORGANIC FRACTION IN AIRBORNE PARTICULATES (ATM-8014191 A01; 12 MONTHS \$60,200)

COLORADO STATE UNIVERSITY

GRAY, WILLIAM M; TROPICAL WEATHER SYSTEM STUDIES IN SUPPORT OF GATE, FGGE, AND HURRICANE PROJECT ACTIVITIES (29M-7925591 A02*; 12 MONTHS \$118,000)

COX, STEPHEN K; MONEX BROAD SCALE RADIATION BUDGET COMPONENTS (ATM-8010691 A02; 12 MONTHS \$151,700)

MCKEE, THOMAS B; STRUCTURE AND EVOLUTION OF TEMPERATURE INVERSIONS IN MOUNTAIN VALLEYS (ATM-8015309 A01; 12 MONTHS \$59,800)

REITER, ELMAR R; CAUSES AND EFFECTS OF ATMOSPHERIC INTERANNUAL VARIABILITY (ATM-8016867 A01; 12 MONTHS \$132,000)

GRAY, WILLIAM M; DEVELOPMENT OF GLOBAL RAWINSONDE DATA DECKS FOR TROPICAL CYCLONE ANALYSIS (ATM-8024674 A01; 12 MONTHS \$50,000)

MIELKE, PAUL W, AND BERRY, KENNETH J; STATISTICAL DETERMINATION OF VALIDITY OF RAWINSONDE COMPOSITE METHODOLOGY (ATM-8107054; 12 MONTHS \$38,200)

REITER, ELMAR R; EFFECTS OF LARGE NORTHERN-HEMISPHERE PLATEAU REGIONS ON THE HEAT AND ENERGY BALANCE OF THE ATMOSPHERE AND ON BOUNDARY LAYER PERTURBATIONS (ATM-8108504; 12 MONTHS \$85,000)

GRANT, LEWIS O; WEATHER MODIFICATION RELATED PHYSICAL STUDIES OF ROCKY MOUNTAIN OROGRAPHIC CLOUDS (ATM-8109590 A01; 12 MONTHS \$235,000)

COTTON, WILLIAM R, AND TRIPOLI, GREGORY J; NUMERICAL SIMULATION AND OBSERVATIONAL ANALYSIS OF MIDLATITUDE CONTI-

MENTAL CUMULONIMBI AND MESOSCALE CONVECTIVE SYSTEMS (ATM-8113082 A01); 12 MONTHS \$221,500

PEARSON, RICHARD; FAST RESPONSE OZONE MEASUREMENTS II
(ATM-8114575 A01); 12 MONTHS \$143,600

BRINGI, V. N.; ANALYSIS OF DUAL-POLARIZATION (ZDR) RADAR MEASUREMENTS (ATM-8117045); 12 MONTHS \$42,600

SMITH, ERIC A. AND VONDER HAAR, THOMAS H.; SATELLITE MEASUREMENTS AND ANALYSIS OF THE RADIATION BUDGET, CLOUDINESS AND PRECIPITATION DURING THE MONSOON EXPERIMENT (ATM-8200808); 12 MONTHS \$100,200

PRENTER, P. M.; ADAPTIVE AND NON-ADAPTIVE DATA COMPRESSION WITH APPLICATIONS TO RADIOMETRIC REMOTE SENSING (COMPUTER/ATMOSPHERIC RESEARCH) (MCS-8201875*); 24 MONTHS \$27,400

BRIER, GLENN W. AND SIDDIQUI, MOHAMMED M.; DEVELOPMENT OF STATISTICAL TECHNIQUES FOR STUDYING NON-LINEAR PROCESSES IN THE WEATHER-CLIMATE SYSTEM (ATM-8204751); 12 MONTHS \$41,400

JOHNSON, RICHARD H.; MESOSCALE CONVECTION AND THE ATMOSPHERIC BOUNDARY LAYER (ATM-8206808); 12 MONTHS \$95,000

SCHUBERT, WAYNE H.; SPECTRAL METHODS AND THE DYNAMICS OF THE TROPICAL ATMOSPHERE (ATM-8207563); 12 MONTHS \$105,400

PIELKE, ROGER A.; A STUDY OF MESOSCALE ATMOSPHERIC PROCESSES (ATM-8242931); 9 MONTHS \$124,800

NATIONAL CENTER FOR ATMOSPHERIC RESEARCH

WHITE, ROBERT M.; OPERATION, MAINTENANCE AND MANAGEMENT OF THE NATIONAL CENTER FOR ATMOSPHERIC RESEARCH AND THE NATIONAL SCIENTIFIC BALLOON FACILITY (ATM-7723757 A95*); \$28,583

WHITE, ROBERT M.; OPERATION, MAINTENANCE AND MANAGEMENT OF THE NATIONAL CENTER FOR ATMOSPHERIC RESEARCH AND THE NATIONAL SCIENTIFIC BALLOON FACILITY (29M-7723757 AA0*); \$135,000

WHITE, ROBERT M.; CONTRACT FOR MANAGEMENT, OPERATION, AND MAINTENANCE OF THE NATIONAL CENTER FOR ATMOSPHERIC RESEARCH (ATM-7723757 AA4*); 12 MONTHS \$90,715

WHITE, ROBERT M.; OPERATION, MAINTENANCE AND MANAGEMENT OF THE NATIONAL CENTER FOR ATMOSPHERIC RESEARCH (ATM-7723757 AB2*); 24 MONTHS \$102,900

WHITE, ROBERT M.; OPERATION, MAINTENANCE AND MANAGEMENT OF THE NATIONAL CENTER FOR ATMOSPHERIC RESEARCH AND THE NATIONAL SCIENTIFIC BALLOON FACILITY (ATM-7723757 AB5*); \$65,825

NATIONAL OCEANIC ATMOSPHERIC ADMINISTRATION-

ENVIRONMENTAL RESEARCH LABORATORIES

BALSLEY, BENJAMIN B.; CONTINUED OPERATION AND FURTHER DEVELOPMENT OF THE POKER FLAT MST RADAR (ATM-8023126 A02*); 12 MONTHS \$338,000

EMMANUEL, C. B.; AIPLEX FLIGHT FOURS (ATM-8206875); 12 MONTHS \$434,200

UNIVERSITY OF COLORADO AT BOULDER

THOMAS, GARY E.; THEORETICAL STUDIES OF PLANETARY ATMOSPHERES (ATM-8007055 A02); 12 MONTHS \$45,400

BLUMEN, WILLIAM, AND HART, JOHN E.; STUDIES OF FLOW OVER OROGRAPHY IN ASSOCIATION WITH ALPEX (ATM-8019958 A01); 12 MONTHS \$29,200

GOLDMAN, MARTIN V. AND TOOMRE, JURI; PLASMA AND FLUID TURBULENCE IN THE SUN AND SOLAR WIND (ATM-8020426 A01); 12 MONTHS \$65,000

KRAUS, ERIC B.; THE OCEANIC AND ATMOSPHERIC BOUNDARY LAYER IN THE EASTERN REGION OF THE SUBTROPICAL OCEANS (ATM-8023334 A01); 12 MONTHS \$52,900

SIEVERS, ROBERT E.; MEASUREMENT AND CHEMISTRY OF ORGANIC CONSTITUENTS IN PRISTINE AND POLLUTED AIR (ATM-8108675 A01); 12 MONTHS \$86,800

MILLER, GIFFORD H.; RACEMIZATION-DERIVED GLACIAL AND INTERGLACIAL-AGE PALEOTEMPERATURE GRADIENTS ACROSS NW EUROPE (ATM-8109013); 12 MONTHS \$66,800

HART, JOHN E.; DYNAMICS OF ROTATING STRATIFIED FLUIDS (ATM-8111718); 24 MONTHS \$50,500

SPEISER, THEODORE W. AND FRITZ, THEODORE A.; THE SOURCE OF LONG-PERIOD GEOMAGNETIC PULSATIONS (ATM-8120551); 12 MONTHS \$19,300

SPEISER, THEODORE W. AND DUSENBERY, P. B.; CURRENT SHEET DYNAMICS AND AURORAL WAVE-PARTICLE INTERACTIONS (ATM-8204647); 12 MONTHS \$36,900

GROSSMAN, ROBERT L.; AIRCRAFT INVESTIGATION OF MARINE PLANETARY BOUNDARY LAYER STRUCTURE AND DYNAMICS IN MONSOON FLOW REGIMES (ATM-8206904); 12 MONTHS \$60,500

UNIVERSITY OF DENVER

VAN ZYL, BERT, AMME, ROBERT C. AND NEUMANN, HERSCHEL; CROSS SECTION MEASUREMENTS OF IMPORTANCE FOR ANALYSIS OF THE PROTON AURORA (ATM-7918242 A02); 12 MONTHS \$78,000

MURCRAY, DAVID G.; MEASUREMENTS OF VARIOUS TRACE CONSTITUENTS IN THE LOWER STRATOSPHERE USING INFRARED TECHNIQUES (ATM-8110534 A01); 12 MONTHS \$166,700

BARCUS, JAMES R.; RADIATION EVENTS AND ELECTRICAL RESPONSE IN THE STRATOSPHERE FOR THE POLAR TRANSITION REGION $7 < L < 20$ (SOLAR TERRESTRIAL) (ATM-8111113 A01); 12 MONTHS \$92,800

PATEL, VITHALBHAI L.; GEOPHYSICAL PLASMA WAVES OBSERVED BY MAGNETOMETER NETWORKS (SOLAR TERRESTRIAL RESEARCH) (ATM-8205467); 12 MONTHS \$54,900

MURCRAY, DAVID G. AND GOLDMAN, AARON; LABORATORY AND THEORETICAL INVESTIGATIONS OF THE INFRARED SPECTRA OF COMPOUNDS OF ATMOSPHERIC INTEREST (ATM-8210460); 12 MONTHS \$32,491

CONNECTICUT

CENTER FOR THE ENVIRONMENT AND MAN INC

SUTERA, ALFONSO; CONTINUING STUDIES ON STRUCTURAL ANALYSIS OF SIMPLE, NON-LINEAR STOCHASTICALLY PERTURBED CLIMATE MODELS (ATM-8022869 A01*); 12 MONTHS \$68,500

HARTFORD GRADUATE CENTER

PANDOLFO, JOSEPH P. AND BROWN, PHILIP S.; USE OF GATE DATA IN NESTED-GRID, PRIMITIVE EQUATION MODELS (ATM-7824273 A03); 6 MONTHS \$2,120

ROBINSON, GEORGE D., PANDOLFO, JOSEPH P., BROWN, PHILIP S. AND SUTERA, ALFONSO; STOCHASTIC PERTURBATION ANALYSIS OF PLANETARY SCALE ATMOSPHERIC FLOW (ATM-8106034 A01); 12 MONTHS \$125,000

ROBINSON, GEORGE D.; KINETIC ENERGY SPECTRUM OF THE NORTHERN HEMISPHERE WESTERLIES (ATMOSPHERIC SCIENCE) (ATM-8111575 A01); 12 MONTHS \$59,000

BROWN, PHILIP S.; NUMERICAL ANALYSIS OF THE COALESCENCE/COLLISION-BREAKUP EQUATION (ATM-8113221); 12 MONTHS \$33,000

YALE UNIVERSITY

SMITH, RONALD B.; THE DYNAMICS OF AIRFLOW AROUND THE ALPS: OBSERVATION AND THEORY (29M-8023348 A01); 12 MONTHS \$41,400

DISTRICT OF COLUMBIA

CARNEGIE INSTITUTION OF WASHINGTON

HOWARD, ROBERT; A STUDY OF ACTIVE AND EPHEMERAL REGIONS OF THE SUN (ATM-8116964); 12 MONTHS \$37,800

CATHOLIC UNIVERSITY OF AMERICA

WHANG, Y. C.; MAGNETOHYDRODYNAMICS OF COROTATING INTERPLANETARY STRUCTURES (ATM-8119302); 12 MONTHS \$34,000

DEPARTMENT OF AIR FORCE

CRESS, TED S.; MITHRAS MAGNETOSPHERE-IONOSPHERE THERMOSPHERE RADAR STUDIES USING THREE HIGH-LATITUDE INCOHERENT SCATTER STATIONS (ATM-8117792 A01*); 12 MONTHS \$50,000

NATIONAL ACADEMY OF SCIENCES

PERRY, JOHN S.; SUPPORT OF THE COMMITTEE ON ATMOSPHERIC SCIENCES (ATM-8024257 A01*); 12 MONTHS \$45,000

PERRY, JOHN S.; SUPPORT OF THE COMMITTEE ON ATMOSPHERIC SCIENCES (ATM-8024257 A03*); 12 MONTHS \$90,500

PERRY, JOHN S.; SUPPORT FOR THE U.S. COMMITTEE FOR THE GLOBAL ATMOSPHERIC RESEARCH PROGRAM (GARP) (29M-8025329 A02); 12 MONTHS \$37,564

PERRY, JOHN S.; SUPPORT FOR THE U.S. COMMITTEE FOR THE GLOBAL ATMOSPHERIC RESEARCH PROGRAM (GARP) (29M-8025329 A03); \$10,000

HART, PEMBROKE J.; SUPPORT OF THE GEOPHYSICS RESEARCH BOARD (GRB) AND THE COMMITTEE ON SOLAR-TERRESTRIAL RESEARCH (CSTR) (02M-8122148*); 12 MONTHS \$60,000

FLORIDA

FLORIDA ATLANTIC UNIVERSITY

BURNETT, CLYDE R.; SPECTROSCOPIC ABSORPTION MEASUREMENTS OF ATMOSPHERIC OH (ATM-7924585 A01); 24 MONTHS \$67,300

FLORIDA STATE UNIVERSITY

KRISHNAMURTI, T. N.; NUMERICAL WEATHER PREDICTION (ATM-7819363 A04); 12 MONTHS \$200,000

ANDRAE, MEINRAT O. AND FERREK, RONALD J.; THE FLUX OF REDUCED SULFUR COMPOUNDS FROM THE OCEANS TO THE ATMOSPHERE (ATM-8017574 A01); 12 MONTHS \$70,800

BARCILON, ALBERT I. AND FITZJARRALD, DANIEL E.; THE ROLE OF MOISTURE ON THE STRUCTURE OF MOUNTAIN WAVES: OBSERVATIONS AND THEORY (ATM-8111454 A01); 12 MONTHS \$41,400

CADET, DANIEL; DETERMINATION OF CLOUD WIND VECTORS OVER EUROPE DURING ALPEX (ATM-8113163); 12 MONTHS \$33,000

BARCILON, ALBERT I.; ANALYTICAL AND NUMERICAL STUDIES OF SUPERCRITICAL QUASIGEOSTROPHIC DISTURBANCES (ATM-8116794); 12 MONTHS \$41,100

CADET, DANIEL; INTER- AND INTRA-ANNUAL VARIABILITY OF THE SOUTHWEST MONSOON OVER THE INDIAN OCEAN DURING RECENT DECADES (ATM-8120575); 12 MONTHS \$40,500

PEFFER, RICHARD L.; A DIAGNOSTIC AND PROGNOSTIC STUDY OF WAVE MEAN FLOW INTERACTIONS IN THE ATMOSPHERE USING FGGE DATA (29M-8208685); 12 MONTHS \$31,400

NOVA UNIVERSITY-OCEAN SCIENCE CENTER

MCCREARY, JULIAN P.; MODELLING TROPICAL OCEAN-ATMOSPHERE INTERACTION (ATM-8205491); 12 MONTHS \$70,500

UNIVERSITY OF FLORIDA-ENGINEERING & INDUSTRIAL EXPERIMENT STATION

UMAN, MARTIN A.; LIGHTNING RETURN STROKE PROPERTIES FROM ELECTRIC AND MAGNETIC FIELD MEASUREMENTS (ATM-7902627 A03); 12 MONTHS \$159,000

UNIVERSITY OF FLORIDA

JONES, DOUGLAS S.; STABLE ISOTOPIC AND SCLEROCRONOLOGIC ANALYSES OF SURF CLAM, SPISULA SOLIDISSIMA: POTENTIAL PALEOCLIMATIC AND PALEOCEANOGRAPHIC INDICATOR ON TEMPERATE CONTINENTAL SHELVES (ATM-8204525); 12 MONTHS \$36,300

UNIVERSITY OF MIAMI-SCHOOL OF MARINE & ATMOSPHERIC SCIENCES

BLECK, RAINER; NUMERICAL MODELING ACTIVITIES RELATED TO THE ALPINE EXPERIMENT (ALPEX) (29M-8022264 A01); 12 MONTHS \$50,400

BOUDRA, DOUGLAS B; STUDIES ON THE EARLY WINTER MESO-TO-SYNOPTIC SCALE EFFECTS OF THE GREAT LAKES (ATM-8022880 A01); 12 MONTHS \$23,100

BLECK, RAINER; STUDY OF LONG RANGE TRANSPORT OF AEROSOLS USING EULERIAN AND LAGRANGIAN TECHNIQUES (ATM-8024064*); 12 MONTHS \$50,000

GEISLER, JOHN E. AND PITCHER, ERIC J; A GENERAL CIRCULATION MODEL STUDY OF THE EFFECT OF TROPICAL PACIFIC SEA SURFACE TEMPERATURE ON ATMOSPHERIC TELECONNECTION PATTERNS (ATM-8120319); 12 MONTHS \$91,000

PROSPERO, JOSEPH M; SUPPORT OF AN ENERGY DISPERSIVE X-RAY (EDAX) SYSTEM (ATM-8120400); 12 MONTHS \$21,000

SCHOTT, FRIEDRICH; ANALYSIS OF FGGE 1979 SOMALI CURRENT EXPERIMENT (29M-8301432); 24 MONTHS \$104,596

PROSPERO, JOSEPH M; AN AEROSOL PROGRAM IN THE GLOBAL WEATHER EXPERIMENT - DATA ANALYSIS II (29M-8209759); 12 MONTHS \$48,600

GEORGIA

GEORGIA INSTITUTE OF TECHNOLOGY MAIN CAMPUS

KIANG, C S; DEVELOPMENT OF GRADUATE RESEARCH OPPORTUNITIES IN ATMOSPHERIC AND TERRESTRIAL SCIENCES (29M-8009560 A01*); 12 MONTHS \$116,600

KIANG, C S; DEVELOPMENT OF GRADUATE RESEARCH OPPORTUNITIES IN ATMOSPHERIC AND TERRESTRIAL SCIENCES (29M-8009560 A04); 12 MONTHS \$94,000

ROPER, ROBERT G; CONTINUOUS OPERATION OF THE FRENCH METEOR RADAR ON PUERTO RICO, 1980 - 1982 (ATM-8012705 A01); 12 MONTHS \$55,100

DAVIS, DOUGLAS D. AND BRADSHAW, JOHN D; SPECTROSCOPY, PHOTOCHEMISTRY AND KINETICS OF SEVERAL IODINE COMPOUNDS OF ATMOSPHERIC INTEREST (ATM-8113237); 18 MONTHS \$168,800

ROPER, ROBERT G; CONTINUOUS OPERATION OF THE GEORGIA TECH METEOR WIND RADAR, 1982-83 (ATM-8207097); 12 MONTHS \$50,400

HAWAII

UNIVERSITY OF HAWAII-MANOA-HONOLULU COMMUNITY COLLEGE

TAKAHASHI, TSUTOMU; GRAUPEL IN A TWO-DIMENSIONAL AXISYMMETRIC CLOUD MODEL (ATM-8002444 A01); 12 MONTHS \$58,800

UNIVERSITY OF HAWAII-MANOA

MURAKAMI, TAKIO; SYNOPTIC AND DYNAMIC STUDIES ON MONSOON CIRCULATIONS IN THE TROPICS (29M-8206350); 12 MONTHS \$77,500

ILLINOIS

IIT RESEARCH INSTITUTE

SNELSON, ALAN; CHARACTERIZATION OF ALKYL RADICAL 02 PRIMARY REACTION PRODUCTS BY MATRIX ISOLATION SPECTROSCOPY (ATM-8107294 A01); 12 MONTHS \$60,500

UNIVERSITY OF CHICAGO

KUO, HSIAO L; CLIMATE AND THERMAL CIRCULATION (ATM-7922048 A02*); 12 MONTHS \$104,900

BANNON, PETER R; MONSOON DYNAMICS AND LEE CYCLOGENESIS (29M-8026790 A02); 12 MONTHS \$55,553

FUJITA, THEODORE; JOINT AIRPORT WEATHER STUDIES PROJECT (ATM-8109828); 8 MONTHS \$114,000

EVENSON, PAUL, AND MEYER, PETER; CHARGE DEPENDENCE OF COSMIC RAY SOLAR MODULATION (ATM-8204188); 6 MONTHS \$97,800

SIMPSON, JOHN A; SOLAR FLARE AND SOLAR INTERPLANETARY PHENOMENA INVESTIGATED WITH HIGH ENERGY CHARGED PARTICLES (ATM-8206418); 12 MONTHS \$180,000

BRAHAM, ROSCOE R; ANALYSIS OF LAKE-EFFECT SNOW STORMS (ATM-8212206); 11 MONTHS \$180,800

UNIVERSITY OF ILLINOIS AT URBANA

TRENBERTH, KEVIN E; INTERANNUAL VARIABILITY OF THE ATMOSPHERIC CIRCULATION IN THE SOUTHERN HEMISPHERE (ATM-7916485 A02); 12 MONTHS \$49,500

GATZ, DONALD F. AND STENSLAND, GARY J; MEASUREMENT OF CRUSTAL AEROSOL COMPOSITION (ATM-8014893 A01); 12 MONTHS \$114,000

MAK, MAN-KIN; RESEARCH IN THE DYNAMICS OF THE MONSOONAL CIRCULATION (ATM-8019423 A01); 12 MONTHS \$48,900

BOWHILL, SIDNEY A; STUDIES OF IONOSPHERIC DYNAMICS BY INCOHERENT SCATTER (ATM-8015563 A01*); 12 MONTHS \$52,000

SASAMORI, TAKASHI; THE STABILITY OF FORCED PLANETARY WAVES IN THE ATMOSPHERE (ATM-8020738 A01); 12 MONTHS \$78,300

BEARD, KENNETH V. AND OCHS, HARRY T; THE PHORETIC SCAVENGING OF AEROSOL IN CLOUDS (ATM-8023638 A01); 12 MONTHS \$61,500

LAMB, PETER J; DIAGNOSTIC STUDIES OF GROWING SEASON RAINFALL FLUCTUATIONS IN CENTRAL NORTH AMERICA (ATM-8100153 A01); 12 MONTHS \$75,000

YEH, K C. AND LIU, CHAO H; STUDIES OF ACOUSTIC-GRAVITY WAVES IN THE ATMOSPHERE (ATM-8104055 A01*); 12 MONTHS \$75,000

CHANGNON, STANLEY A. AND HSU, CHIN-FEI; DEVELOP AND TEST TECHNIQUES TO EVALUATE WEATHER MODIFICATION (ATM-8107087 A01); 12 MONTHS \$99,400

JOHNSON, DAVID B. AND JAMESON, ARTHUR R; REMOTE SENSING OF STORM MICROPHYSICS (ATM-8107169); 12 MONTHS \$107,900

JAMESON, ARTHUR R. AND JOHNSON, DAVID B; OBSERVED RAIN-DROP SHAPE AND MEASUREMENT OF PRECIPITATION BY RADAR (ATM-8108455); 12 MONTHS \$58,600

WILHELMSON, ROBERT B. AND OGURA, YOSHIMITS; AN INTERACTIVE DISPLAY SYSTEM FOR ATMOSPHERIC RESEARCH AT THE UNIVERSITY OF ILLINOIS (ATM-8113337); 12 MONTHS \$101,000

CHANGNON, STANLEY A; TEMPORAL DISTRIBUTION OF THUNDERSTORMS (ATM-8114724); 6 MONTHS \$32,000

LAMB, PETER J; WORKSHOP TO ASSESS THE PRESENT & POTENTIAL USE OF CLIMATE INFORMATION BY THE PRIVATE AGRICULTURAL SECTOR (ATM-8116615); 12 MONTHS \$19,560

BOWHILL, SIDNEY A. AND BOWHILL, SIDNEY A; HIGH RESOLUTION METEOR RADAR OBSERVATIONS OF WINDS IN THE MESOSPHERE AND LOWER THERMOSPHERE AT URBANA, ILLINOIS (ATM-8117440); \$50,000

BOWHILL, SIDNEY A; MESOSPHERIC RESEARCH WITH THE URBANA COHERENT-SCATTER RADAR (AERONOMY) (ATM-8120371); 12 MONTHS \$60,000

OCHS, HARRY T. AND BEARD, KENNETH V; MICROPHYSICS OF PRECIPITATION FORMATION (ATM-8121390); 12 MONTHS \$41,200

SECHRIST, CHALMERS F. AND GARDNER, CHESTER S; THEORETICAL AND LIDAR STUDIES OF SODIUM LAYER STRUCTURE AND DYNAMICS (ATM-8204041); 12 MONTHS \$80,000

LIU, CHAO H. AND YEH, K C; STUDIES OF SCINTILLATION PHENOMENA IN THE IONOSPHERE (ATM-8208931*); 12 MONTHS \$65,000

OGURA, YOSHIMITS, AND WILHELMSON, ROBERT B; NUMERICAL SIMULATION AND OBSERVATIONAL ANALYSIS OF CONVECTIVE STORMS (ATM-8210130); 12 MONTHS \$133,000

OGURA, YOSHIMITS, AND SOONG, SU-TZAI; INTERACTION BETWEEN CUMULUS AND THE LARGE-SCALE FIELDS IN THE TROPICS (29M-8211786); 12 MONTHS \$80,000

INDIANA

PURDUE UNIVERSITY

AGEE, ERNEST M; MICROSCALE-MESOSCALE CELLULAR CONVECTION (ATM-7927149 A02); 12 MONTHS \$70,500

DALE, ROBERT F; THE USE OF WEATHER AND CLIMATE INFORMATION IN CORN PRODUCTION (ATM-8021075 A01); 12 MONTHS \$76,000

VINCENT, DAYTON G; DIAGNOSTIC ANALYSIS OF ECMWF/FGGE DATA FIELDS IN THE SOUTH PACIFIC DURING JANUARY, 1979 (29M-8200684); 24 MONTHS \$76,300

IOWA

DRAKE UNIVERSITY

SKADRON, GEORGE; ENERGETIC IONS UPSTREAM FROM THE EARTH'S BOW SHOCK (29M-8111756 A01); 12 MONTHS \$100

IOWA STATE UNIVERSITY OF SCIENCE & TECHNOLOGY

CHEN, TSING-CHA; ATMOSPHERIC ENERGETICS AND DYNAMICS STUDIES (ATM-7915800 A01); 12 MONTHS \$50,000

STANFORD, JOHN L; STRUCTURE OF GLOBAL ATMOSPHERIC WIND AND TEMPERATURE FIELDS FROM SATELLITE RADIANCE MEASUREMENTS (29M-8121352); 12 MONTHS \$54,400

CHEN, TSING-CHA; ENERGETICS AND CLIMATOLOGY OF THE TROPICS (29M-8206798); 12 MONTHS \$30,300

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BLANCHARD, DUNCAN C; ELECTRICAL CHARGES AND BACTERIAL CONCENTRATIONS IN JET DROPS, AND THE INVOLVEMENT OF JET DROPS IN AN ATMOSPHERIC SEA-SALT INVERSION (ATM-8015495 A01); 12 MONTHS \$65,900

MOLINARI, JOHN; HURRICANE LANDFALL STUDIES (ATM-8025559 A02); 12 MONTHS \$46,300

ORVILLE, RICHARD E; LIGHTNING STUDIES IN THE THUNDERSTORM RESEARCH INTERNATIONAL PROGRAM (TRIP) AND IN THE COOPERATIVE CONVECTIVE PRECIPITATION EXPERIMENT (CCOPE) (ATM-8026533 A02); 12 MONTHS \$105,400

BOSART, LANCE F; SYNOPTIC AND SUB-SYNOPTIC CASE STUDIES OF CYCLONEANTICYCLONE COUPLES (ATM-8026557 A02); 12 MONTHS \$113,200

ORVILLE, RICHARD E; AN INTERACTIVE COMPUTER-DRIVEN VIDEO DISPLAY SYSTEM FOR ATMOSPHERIC SCIENCE RESEARCH (ATM-8100157); 12 MONTHS \$126,100

MOHNEN, VOLKER A, AND MCLAREN, EUGENE; SO₂ OXIDATION RATE ON WELL-CHARACTERIZED SURFACES - A LABORATORY STUDY (ATM-8106061 A01); 12 MONTHS \$98,500

CIPRIANO, RAMON J; THE RELATIVE IMPORTANCE OF JET AND FILM DROPS IN THE PRODUCTION OF THE MARINE AEROSOL AND RESPIRABLE BIOSOLS (ATM-8108711 A01); 12 MONTHS \$52,300

LOESCH, ARTHUR Z; ANALYTICAL AND NUMERICAL STUDIES OF SUBPERICRITICAL QUASI-GEOSTROPHIC DISTURBANCES (ATM-8117403); 12 MONTHS \$38,200

MOHNEN, VOLKER A, AND KADLECEK, JOHN A; AQUEOUS PHASE ATMOSPHERIC CHEMISTRY: FIELD STUDIES OF CLOUD AND PRECIPITATION CHEMISTRY (ATM-8212203); 12 MONTHS \$119,200

STATE UNIVERSITY AT BUFFALO

GEORGE, WILLIAM K; ROLE OF TURBULENT BUOYANT PLUMES IN ATMOSPHERIC PROCESSES (ATM-8023699); 12 MONTHS \$70,500

UNIVERSITY OF ROCHESTER

GABRIEL, K R, AND HALL, W J; PERMUTATION INFERENCE IN WEATHER MODIFICATION EXPERIMENTATION (ATM-8109586 A01); 12 MONTHS \$74,000

NORTH CAROLINA

DUKE UNIVERSITY

KNOERR, KENNETH R, AND SHAUGHNESSY, EDWARD J; RELATING FLOW STRUCTURE WITHIN FOREST CANOPIES TO TURBULENT EXCHANGE WITH THE ATMOSPHERE (ATM-7825944 A02); 12 MONTHS \$67,000

LIVINGSTONE, DANIEL A; DETAILED TROPICAL RECORDS OF GLOBAL CLIMATIC CHANGE (ATM-8003516 A03*); 12 MONTHS \$96,700

NORTH CAROLINA STATE UNIVERSITY AT RALEIGH

RISLEY, JOHN S; ELECTRON IMPACT PHOTOEMISSION CROSS SECTIONS OF ATMOSPHERIC GASES FOR THE VACUUM LIGHT STANDARD PROJECT. (AERONOMY) (ATM-8121724); 12 MONTHS \$88,200

UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL

SMITH, V K; THE METHODOLOGY AND PRACTICE OF ECONOMIC IMPACT ANALYSES FOR CLIMATE CHANGES (ATM-8107990); 12 MONTHS \$73,900

SMITH, V K; THE METHODOLOGY AND PRACTICE OF ECONOMIC IMPACT ANALYSES FOR CLIMATE CHANGES (ATM-8107990 A01); 12 MONTHS \$76,300

OHIO

CASE WESTERN RESERVE UNIVERSITY

MATHEWS, JOHN D; RESEARCH IN IONOSPHERIC PHYSICS (ATM-7918379 A02); 12 MONTHS \$70,000

FRYE, GLENN M; OBSERVATION OF SOLAR NEUTRONS (ATM-8206044); 6 MONTHS \$29,200

OHIO STATE UNIVERSITY

SELIGA, THOMAS A; RAINFALL STUDIES USING THE DIFFERENTIAL REFLECTIVITY RADAR TECHNIQUES (ATM-8003376 A02); 12 MONTHS \$166,800

SELIGA, THOMAS A; RAINFALL STUDIES USING THE DIFFERENTIAL REFLECTIVITY RADAR TECHNIQUES (29M-8003376 A03); \$10,600

THOMPSON, LONNIE G; PALEOCLIMATIC ICE CORE RECORDS FROM THE TROPICAL QUELCCAYA ICE CAP (ATM-8105079 A01*); 12 MONTHS \$51,500

MERCER, JOHN H; GLACIAL GEOLOGICAL AND FOSSIL BEETLE STUDIES IN SOUTHERN ARGENTINA: A CLIMATIC RECONSTRUCTION OF THE LAST 15,000 YEARS (EAR-8200251*); 12 MONTHS \$5,000

COLINVAUX, PAUL A; ENVIRONMENT AND CLIMATE OF THE AMERICAN EQUATOR SINCE 18K (DEB-8202658*); 12 MONTHS \$20,000

OKLAHOMA

UNIVERSITY OF OKLAHOMA NORMAN CAMPUS

CARR, FREDERICK H; OBSERVATIONAL AND NUMERICAL STUDIES OF CYCLOGENESIS (ATM-8019430 A01); 12 MONTHS \$48,000

CARR, FREDERICK H; SYNOPTIC AND NUMERICAL STUDIES OF ARABIAN SEA DISTURBANCES DURING MONEX (ATM-8119321); 12 MONTHS \$42,600

SASAKI, YOSHI K, GOERSS, JAMES S, AND MCGINLEY, JOHN M; DYNAMICAL ANALYSIS OF OROGRAPHIC FLOW AND LEE FRONTOGENESIS AND CYCLOGENESIS OF ALPS (29M-8201576); 12 MONTHS \$35,400

BLUESTEIN, HOWARD B; THE UNIVERSITY OF OKLAHOMA SEVERE STORMS INTERCEPT PROJECT - 1982 (ATM-8204611); 12 MONTHS \$9,800

OREGON

OREGON GRADUATE CENTER

RASMUSSEN, REINHOLD A, AND KHALIL, M A; SYSTEMATIC GLOBAL MEASUREMENTS OF ATMOSPHERIC METHANE (ATM-8109047 A02); 12 MONTHS \$118,800

OREGON STATE UNIVERSITY

MAHRT, LARRY J; FLUXES IN THE CLOUD TOPPED, AMTEX, MIXED LAYER (ATM-7910042 A02); 12 MONTHS \$35,400

DEARDORFF, JAMES W; LABORATORY INVESTIGATIONS OF MIXED LAYER TURBULENCE AND ENTRAINMENT (ATM-8019778 A01); 12 MONTHS \$123,800

MAHRT, LARRY J; OBSERVATIONAL ANALYSES OF THE NOCTURNAL BOUNDARY LAYER (ATM-8107603); 12 MONTHS \$72,400

SIMONEIT, BERND R; REMOVAL OF ORGANIC MATTER FROM THE TROPOSPHERE BY DRY FALLOUT AND WASHOUT (ATMOSPHERIC CHEMISTRY) (ATM-8116622); 12 MONTHS \$73,200

ENFIELD, DAVID B; STUDIES OF TROPICAL PACIFIC LOW-LEVEL WIND VARIABILITY (ATM-8120141); 12 MONTHS \$61,100

SCHRADER, HANS J, SCHEIDEGGER, KENNETH F, AND PISIAS, NICKLAS G; VARIED SEDIMENTS FROM THE SOUTHERN GULF OF CALIFORNIA: A CLIMATOLOGICAL STUDY OF PROXIES OVER THE LAST 24,000 YEARS (ATM-8121775*); 12 MONTHS \$100,900

PISIAS, NICKLAS G; PROJECT SPECMAP: MAPPING VARIATIONS IN OCEAN SPECTRA OVER A FREQUENCY RANGE 10-5 TO 10-1 CYCLES PER YEAR (ATM-8204127*); 12 MONTHS \$14,070

GATES, W L, ESBENSEN, S K, HAN, Y J, KIM, J W, AND SCHLESINGER, M E; RESEARCH ON THE DYNAMICS OF CLIMATE (29M-8205992*); 12 MONTHS \$267,000

PAN, HUA-LU; INTERACTIONS BETWEEN THE TROPICAL AND MIDLATITUDE REGIONS DURING WINTER MONSOON (ATM-8209057); 12 MONTHS \$48,800

MURPHY, ALLAN H; ORGANIZATION OF THE SECOND INTERNATIONAL CONFERENCE ON STATISTICAL CLIMATOLOGY (ATM-8209802); 18 MONTHS \$9,305

ESBENSEN, S K; INTERACTION OF CONVECTION AND LARGE-SCALE TROPICAL FLOWS (ATM-8213130); 12 MONTHS \$67,600

UNIVERSITY OF OREGON - EUGENE

KEMP, JAMES C; NEW POLARIZED-LIGHT AND MAGNETIC OBSERVATIONS OF THE SUN (ATM-8206924); 12 MONTHS \$39,100

PENNSYLVANIA

DREXEL UNIVERSITY

BANDY, ALAN R; SUPPLEMENT TO DISTRIBUTION AND EXCHANGE OF TRACE SULFUR GASES IN THE UPPER TROPOSPHERE AND LOWER STRATOSPHERE (ATM-8020161 A01); 6 MONTHS \$29,400

FRANKLIN INSTITUTE

POMERANTZ, MARTIN A, AND DUGGAL, SHAKTI P; THE SUN AND COSMIC RAYS (ATM-8005866 A02); 12 MONTHS \$158,500

PENNSYLVANIA STATE UNIVERSITY

DUTTON, JOHN A, AND SHIRER, HAMPTON N; THERMALLY FORCED ATMOSPHERIC FLOW (ATM-7908354 A02); 12 MONTHS \$81,000

HEICKLEN, JULIAN P, AND SIMONAITIS, ROMUALDAS; LABORATORY KINETIC STUDIES OF ATMOSPHERIC REACTIONS (ATM-7909169 A01); 12 MONTHS \$84,029

KLEVANS, EDWARD H; COMPARISON OF MIDLATITUDE SPREAD F THEORY WITH MEASUREMENTS (ATM-8005368 A02); 2 MONTHS \$4,300

DUTTON, JOHN A; NONLINEAR DYNAMICS OF MOIST CONVECTION AND ITS EFFECT ON EXTRATROPICAL CIRCULATION SYSTEMS (ATM-8113223*); 12 MONTHS \$145,000

HEICKLEN, JULIAN P, AND SIMONAITIS, ROMUALDAS; PHOTOOXIDATION OF ALDEHYDES (ATM-8211603); 12 MONTHS \$91,400

CASTLEMAN, A W; HETEROGENEOUS CHEMISTRY STUDIES OF THE FORMATION, STABILITY, AND REACTIONS OF SMALL CLUSTERS IMPORTANT IN ATMOSPHERIC CHEMISTRY (ATM-8212948); 3 MONTHS \$121,689

UNIVERSITY OF PITTSBURGH

- ZIFF, EDWARD C; LABORATORY STUDIES ON DISSOCIATIVE RECOMBINATION OF VIBRATIONALLY EXCITED IONS AND ON AERONOMICALLY IMPORTANT METASTABLE SPECIES (ATM-8107145 A01); \$65,000
- BIONDI, MANFRED A; AIRGLOW AND AURORAL STUDIES OF THE EARTH'S IONOSPHERE (ATM-8121723); 12 MONTHS \$87,500

RHODE ISLAND

BROWN UNIVERSITY

- IMBRIE, JOHN, AND PRELL, WARREN L; PROJECT SPECMAP: MAPPING VARIATIONS IN OCEAN SPECTRA OVER A FREQUENCY RANGE 10⁻⁵ TO 10⁻¹ CYCLES PER YEAR (ATM-8018897 A01*); 12 MONTHS \$103,950
- WEBB, THOMPSON; COHMAP - CLIMATES OF THE HOLOCENE: MAPPING BASED ON POLLEN DATA (29M-8111870 A01); 12 MONTHS \$90,300
- CALO, JOSEPH M; EXPERIMENTAL STUDIES OF THE INFRARED SPECTROSCOPY OF ATMOSPHERIC AND OTHER MOLECULAR COMPLEXES (ATM-8118100 A01); 12 MONTHS \$161,700

UNIVERSITY OF RHODE ISLAND-GRADUATE SCHOOL OF OCEANOGRAPHY

- LEINEN, MARGARET; PROJECT SPECMAP: MAPPING VARIATIONS IN OCEAN SPECTRA OVER A FREQUENCY RANGE 10⁻⁵ TO 10⁻¹ CYCLES PER YEAR (ATM-8018896 A02*); 12 MONTHS \$42,000
- KENNETT, JAMES P; HIGH RESOLUTION HOLOCENE PALEOCLIMATOLOGY AND STRATIGRAPHY, ORCA BASIN, GULF OF MEXICO (ATM-8019059 A01*); 12 MONTHS \$19,500
- LEINEN, MARGARET; QUANTITATIVE DETERMINATION OF GLACIAL AND POST-GLACIAL ATMOSPHERIC CIRCULATION OVER THE NORTH PACIFIC OCEAN (ATM-8116301); 12 MONTHS \$35,000

UNIVERSITY OF RHODE ISLAND

- DUCE, ROBERT A. AND BUTLER, ERIC L; SUPPLEMENT TO 'METHYL IODIDE AND THE ATMOSPHERIC IODINE CYCLE' (ATM-7816516 A04); 6 MONTHS \$6,000

SOUTH CAROLINA

UNIVERSITY OF SOUTH CAROLINA AT COLUMBIA

- FILLON, RICHARD H. AND WILLIAMS, DOUGLAS F; RAPID PALEOCLIMATIC EVENTS AS RECORDED IN LATE PLEISTOCENE SEDIMENTS OF MARGINAL SEAS (ATM-8200424); 24 MONTHS \$167,400

SOUTH DAKOTA

SOUTH DAKOTA SCHOOL OF MINES AND TECHNOLOGY

- ORVILLE, HAROLD D; NUMERICAL MODELING STUDIES OF CONVECTIVE STORMS (ATM-7916147 A02); 12 MONTHS \$169,200
- SMITH, PAUL L. MUSIL, DENNIS J. AND HEYMSFIELD, ANDREW J; STUDY OF PRECIPITATION AND ELECTRIFICATION PROCESSES IN MONTANA STORMS AS PART OF COPE (ATM-8025598 A01); 12 MONTHS \$97,000
- SMITH, PAUL L. AND MUSIL, DENNIS J; INVESTIGATION OF THE VALIDITY OF THE CONCEPTUAL MODEL UNDERLYING GROSSVERSUCH IV (ATM-8204652); 6 MONTHS \$139,600

TEXAS

RICE UNIVERSITY

- FEW, ARTHUR A. AND WEINHEIMER, ANDREW; A THEORETICAL INVESTIGATION OF THE INFLUENCE OF CORONAE FROM HYDROMETERS ON THE PROPAGATION OF INTRACLOUD LIGHTNING (ATM-8016164 A01); 12 MONTHS \$68,500
- HILL, T W. REIFF, P H, SPIRO, ROBERT W. AND WOLF, RICHARD A; ANALYSIS OF DATA FROM THE MAGNETOSPHERE AND SOLAR WIND (ATM-8017316 A01); 12 MONTHS \$108,400
- HILL, T W. AND DESSLER, ALEXANDER J; THEORETICAL STUDY OF THE JOVIAN MAGNETOSPHERE (ATM-8019425 A01); 12 MONTHS \$88,900
- BERNSTEIN, WILLIAM; THE BEAM PLASMA DISCHARGE (SOLAR TERRESTRIAL) (ATM-8022550 A01); 22 MONTHS \$102,100
- GANGULY, SUMAN; COORDINATED INCOHERENT SCATTER AND H F SOUNDER OBSERVATIONS AT ARECIBO (ATM-8022871 A02); 6 MONTHS \$7,000
- STEBBINGS, RONALD F; LABORATORY STUDY OF ATOMIC AND MOLECULAR COLLISION PROCESSES OF ATMOSPHERIC IMPORTANCE (ATM-8023219 A01*); 12 MONTHS \$121,000
- FEW, ARTHUR A; EXPERIMENTAL AND THEORETICAL RESEARCH OF INTRACLOUD LIGHTNING (ATM-8111715); 12 MONTHS \$131,800
- GORDON, WILLIAM E; IONOSPHERIC MODIFICATION EXPERIMENTS AT ARECIBO (ATM-8116046 A01); \$67,900
- VOIGT, GERD-HANN; A MAGNETO-HYDROSTATIC MODEL OF THE EARTH'S MAGNETOSPHERIC B-FIELD (ATM-8120391); 12 MONTHS \$44,900
- WOLF, RICHARD A, SPIRO, ROBERT W. AND VOIGT, G H; THEORETICAL INVESTIGATION OF MAGNETOSPHERIC CONVECTION (ATM-8206026); 12 MONTHS \$98,400
- GANGULY, SUMAN, AND GORDON, WILLIAM E; NEW HEATER INDUCED RESULTS: (A) ION MASS SPECTROMETER (B) TOPSIDE PLASMA LINE (ATM-8209383); 12 MONTHS \$15,200

SOUTHWEST RESEARCH INSTITUTE

- BARFIELD, J N; DEVELOPMENT OF A SOLAR-TERRESTRIAL DATA ANALYSIS FACILITY (ATM-8205988); 12 MONTHS \$70,300
- LIN, CHIN S. AND BARFIELD, J N; STUDY OF STORMTIME PC5 WAVES USING THE IMS DATA BASE (ATM-8208777); 12 MONTHS \$28,400

TEXAS A & M UNIVERSITY

- GRIFFITHS, JOHN F; A STUDY OF TEMPERATURE AND PRECIPITATION VARIABILITY IN NORTH AMERICA DURING 1880-1980 USING

- RURAL STATIONS WITH STABLE LOCATIONS (ATM-8117008); 12 MONTHS \$34,770

- KATTAWAR, GEORGE W; A THEORETICAL STUDY OF LIGHT SCATTERING IN THE ATMOSPHERE BY AEROSOLS (ATM-8204191*); 24 MONTHS \$47,800

TEXAS TECH UNIVERSITY

- LEARY, COLLEEN A; MESOSCALE ORGANIZATION OF CONVECTION (ATM-8205781*); 12 MONTHS \$66,000

UNIV OF TEXAS AT DALLAS

- HEIKKILA, WALTER J. AND CRAGIN, BRUCE L; THE ONSET OF A SUBSTORM (SOLAR TERRESTRIAL RESEARCH) (ATM-8025194 A01); 12 MONTHS \$65,000
- TINSLEY, BRIAN A; PRECIPITATION OF NEUTRAL ATOMS INTO THE UPPER ATMOSPHERE AT LOW AND MIDDLE LATITUDES (ATM-8116183); 12 MONTHS \$85,000
- HANSON, WILLIAM B. AND MANTAS, GEORGE P; IONOSPHERE - PLASMASPHERE DYNAMICS MODELING (ATM-8200644); 12 MONTHS \$21,600

UTAH

UNIVERSITY OF UTAH

- LIU, KUO-NAN; RADIATIVE EQUILIBRIUM AND SATELLITE SOUNDING IN CIRRUS CLOUDY ATMOSPHERES (ATM-8109050*); 12 MONTHS \$72,600
- PAEGLE, JAN, AND PAEGLE, JULIA N; DIAGNOSES AND SIMULATION OF TOPOGRAPHICALLY GENERATED BOUNDARY LAYER FLOWS (ATM-8121664); 12 MONTHS \$53,800
- SASSEN, KENNETH; MOBILE POLARIZATION LIDAR SUPPORT FOR THE COLORADO OROGRAPHIC SEEDING EXPERIMENT (ATM-8121913); 9 MONTHS \$12,350

UTAH STATE UNIVERSITY

- SCHUNK, ROBERT W; ADDITIONAL THEORETICAL STUDIES OF PLASMA AND NEUTRAL GAS TRANSPORT PROCESSES IN THE IONOSPHERE (ATM-8015497 A01); 12 MONTHS \$95,000
- MOORE, WILLIAM M. AND MC CULLOUGH, EDWARD A; A STUDY OF HALOGENATED COMPOUNDS OF ATMOSPHERIC IMPORTANCE USING NEGATIVE SURFACE IONIZATION (ATM-8015582 A01); 12 MONTHS \$67,300
- ST-MAURICE, J.-P.; A CONTINUING STUDY OF IONOSPHERIC AND THERMOSPHERIC DYNAMICS AND RELATED EFFECTS (ATM-8115855); 12 MONTHS \$54,200
- ADAMS, GENE W; EXPERIMENTAL INVESTIGATION OF STRATOSPHERIC AND MESOSPHERIC SCATTERING PROCESS (ATM-8117275); 12 MONTHS \$75,000
- POSTER, JOHN C; DEVELOPMENT OF AN AURORAL PRECIPITATION INDEX (ATM-8119477); 12 MONTHS \$32,900
- HILL, GEOFFREY E; ASSESSMENT OF PRECIPITATION AUGMENTATION POTENTIAL IN WINTER OROGRAPHIC CLOUD SYSTEMS (ATM-8120416); 12 MONTHS \$59,100

VERMONT

INDIVIDUAL AWARD

- BETTS, ALAN K; DEVELOPMENT OF THERMODYNAMIC AND CONVECTIVE MODELS (ATM-8120444); 36 MONTHS \$55,000

VIRGINIA

AMERICAN GEOLOGICAL INSTITUTE

- UNKLESBAY, A G; TRAVEL OF UNITED STATES SCIENTISTS TO XITH CONGRESS OF INTERNATIONAL ASSOCIATION FOR QUATERNARY RESEARCH, MOSCOW, USSR, AUGUST 1-9, 1982 (04R-8206631*); 6 MONTHS \$5,000

UNIVERSITY OF VIRGINIA

- PIELKE, ROGER A; A STUDY OF MESOSCALE ATMOSPHERIC PROCESSES (ATM-8100514 A01); \$16,600
- GARSTANG, MICHAEL; THE NEAR SURFACE STRUCTURE OF SEVERE CONVECTIVE STORMS (ATM-8115397); 18 MONTHS \$50,500
- FRANK, WILLIAM M. AND PIELKE, ROGER A; CUMULUS PARAMETERIZATION EXPERIMENTS USING SUBGRID SCALE FORCING AND VARIABLE GRID SPACINGS (ATM-8120673); 12 MONTHS \$60,400
- WARNER, CHARLES; CLOUD MAPPING IN MONSOON FLOW REGIMES (ATM-8210128); 12 MONTHS \$29,600

WASHINGTON

BATTELLE MEMORIAL INSTITUTE-BATTELLE NORTHWEST LABORATORIES

- KLECKNER, EDWARD W, SLATER, DONALD W. AND SMITH, LEROI L; ANALYSIS OF PHOTOMETRIC OBSERVATIONS OF THE MID-LATITUDE AURORAL REGION OBTAINED DURING THE IMS (ATM-8111896 A01); \$75,000

UNIVERSITY OF WASHINGTON

- BAKER, MARCIA B; COLLABORATIVE STUDIES OF THE INFLUENCE OF INHOMOGENEOUS MIXING ON THE EVOLUTION OF DROPLET SPECTRA AND RAINDROP PRODUCTION IN CLOUDS (ATM-7911147 A01); 12 MONTHS \$44,900
- PARKS, GEORGE K; AURORAL X-RAY IMAGING (SOLAR TERRESTRIAL) (ATM-8002460 A03); 6 MONTHS \$25,200
- HOBBES, PETER V; STUDIES OF EXTRATROPICAL CYCLONIC STORMS: THE CYCLES PROJECT (29M-8006303 A02); 12 MONTHS \$377,500
- COVERT, DAVID S; OPTICAL SENSING OF SULFATE COMPOUNDS IN ATMOSPHERIC AEROSOLS (ATM-8011395 A01); 12 MONTHS \$106,100

HARRISON, HALSTEAD; FURTHER RESEARCH ON THE MARINE SURFACE AND ATMOSPHERIC BOUNDARY LAYERS (ATM-8016915 A01; 6 MONTHS \$6,360)

KATSAROS, KRISTINA B; MEASUREMENT AND ANALYSIS OF RADIATION FLUX COMPONENTS IN MID-LATITUDE CYCLONES AS PART OF STREX (STORM TRANSFER RESPONSE EXPERIMENT) (ATM-8017069 A01; 12 MONTHS \$34,500)

HOUE, ROBERT A; STUDIES OF MESOSCALE CONVECTIVE CLOUD SYSTEMS IN THE TROPICS AND MID-LATITUDES (ATM-8017327 A02*; 12 MONTHS \$113,900)

BAKER, D JAMES, AND NOWLIN, WORTH D; ANALYSIS OF FGGE DRIFTING BUOY DATA (29M-8018172 A01*; 12 MONTHS \$66,900)

STUIVER, MINZE; ATMOSPHERIC ^{14}C ACTIVITY AND ITS RELATIONSHIP TO SOLAR VARIABILITY AND CLIMATIC CHANGE (ATM-8022240 A02; 12 MONTHS \$98,600)

REED, RICHARD J; TROPICAL CIRCULATION STUDIES BASED ON GATE AND FGGE DATA (29M-8103697 A01; 12 MONTHS \$77,200)

WALLACE, JOHN M, AND HARTMANN, DENNIS L; GENERAL CIRCULATION STUDIES (CLIMATE DYNAMICS) (ATM-8106099 A01*; 12 MONTHS \$160,000)

STUIVER, MINZE; ELEVENTH INTERNATIONAL RADIOCARBON CONFERENCE (ATM-8107137*); 12 MONTHS \$6,000

HOBBS, PETER V; AIRBORNE MEASUREMENTS OF THE MICROSTRUCTURES OF MARITIME AND CONTINENTAL CLOUDS WITH PARTICULAR REFERENCE TO ICE MULTIPLICATION AND THE SEEDABILITY OF THE CLOUDS (ATM-8111760); 12 MONTHS \$75,150

HOBBS, PETER V; STUDIES IN CLOUD CHEMISTRY (ATM-8112089); 12 MONTHS \$151,500

HOBBS, PETER V, AND RADKE, LAWRENCE F; ANALYSIS AND FURTHER MEASUREMENTS OF THE VOLCANIC EMISSIONS FROM MT. ST. HELENS (ATM-8112720*); 12 MONTHS \$40,000

BAKER, MARCIA B, ERICKSON, K B, HARRISON, HALSTEAD, AND LETTENMAIER, DENNIS P; CONTINUED DEVELOPMENT AND APPLICATION OF STOCHASTIC MODELS FOR WET REMOVAL OF ATMOSPHERIC TRACE SPECIES (ATM-8112724*); 12 MONTHS \$67,100

HOLLOWAY, GREG, AND MORITZ, RICHARD E; PROCESS STUDIES IN THE PREDICTABILITY OF THE ATMOSPHERE (ATM-8112952 A01; 12 MONTHS \$37,600)

HARRISON, HALSTEAD; MEASUREMENT OF THE 'CEANS' CONTENT AND FLUXES OF CARBONYL SULFIDE (ATM-8118233); 12 MONTHS \$44,800

BAKER, MARCIA B; DROPLET SPECTRAL EVOLUTION, ENTRAINMENT AND MIXING IN NATURAL CLOUDS, BASED ON ANALYSIS OF RECENT DATA (ATM-8203447); 12 MONTHS \$66,000

MASS, CLIFFORD F; MESOSCALE MODELING OF THE TOPOGRAPHICALLY FORCED FLOWS IN WESTERN WASHINGTON STATE (ATM-8205390); 12 MONTHS \$21,600

WARREN, STEPHEN G, AND WISCOMBE, WARREN J; SOLAR AND INFRARED RADIATION MODELING FOR ICE-COVERED OCEANS (ATM-8206318*); 11 MONTHS \$47,300

HOLZWORTH, ROBERT H; ELECTRODYNAMICS OF THE MIDDLE ATMOSPHERE: SUPERPRESSURE BALLOON PROGRAM (ATM-8212283*); 12 MONTHS \$109,000

WASHINGTON STATE UNIVERSITY

CAMPBELL, MALCOLM J, AND SHEPPARD, JOHN C; ATMOSPHERIC RADICAL MEASUREMENTS (ATM-8121694); 8 MONTHS \$82,300

WISCONSIN

UNIVERSITY OF WISCONSIN-MADISON

JOHNSON, DONALD R; DEVELOPMENT OF VIDEO SYSTEMS FOR METEOROLOGY EDUCATION AND RESEARCH (ATM-7919005 A01; 12 MONTHS \$40,000)

KUTZBACH, JOHN E; AN INTERDISCIPLINARY RESEARCH PROGRAM IN CLIMATOLOGY (ATM-7926039 A02; 12 MONTHS \$311,850)

HOUGHTON, DAVID D; ASSIMILATION OF SATELLITE AND RADAR DATA INTO MESOSCALE PREDICTION MODELS (ATM-8005369 A01; 12 MONTHS \$108,000)

ANDERSON, CHARLES E, AND SCHLESINGER, ROBERT E; STUDIES OF THE DEVELOPMENT AND EVOLUTION OF LOCAL SEVERE STORMS FROM SESAME 1979 DATA (ATM-8017350 A01; 12 MONTHS \$117,000)

SUOMI, VERNER E, AND GAUTIER, CATHERINE; SATELLITE ESTIMATES OF LARGE-SCALE INSOLATION OVER THE TROPICAL OCEANS (ATM-8018529 A01; 12 MONTHS \$28,800)

ROESLER, FRED L, AND SCHERB, FRANK; HIGH-RESOLUTION SPECTROSCOPIC STUDIES IN AERONOMY (ATM-8081084 A01*); 12 MONTHS \$30,000

JOHNSON, DONALD R; DIAGNOSTICS OF OBSERVED AND NUMERICALLY SIMULATED EXTRATROPICAL CYCLONES (II) (ATM-8110678 A02; 12 MONTHS \$108,050)

KUTZBACH, JOHN E, AND SWAIN, ALBERT M; COHMAP: CLIMATES OF THE HOLOCENE: MAPPING BASED ON POLLEN DATA (ATM-8111455 A01; 12 MONTHS \$46,150)

HOUGHTON, DAVID D; MODELING THE SEASONAL CYCLE IN THE ATMOSPHERIC CIRCULATION (ATM-8113464); 12 MONTHS \$100,000

SUOMI, VERNER E, HINTON, BARRY B, AND WYLLIE, DONALD P; SEA SURFACE WIND STRESS FIELDS FOR THE GLOBAL WEATHER EXPERIMENT (29M-8119895); 24 MONTHS \$76,300

HASTENRATH, STEFAN L; SEASONAL HEAT BUDGET AND THERMAL STRUCTURE OF THE TROPICAL OCEANS (OCE-8180583*); 12 MONTHS \$31,000

WANG, PAO-KUAN, AND WU, CHIEN-FU; HISTORICAL CLIMATE OF CHINA AS REVEALED BY ANCIENT CHINESE LITERATURE (ATM-8190809); 12 MONTHS \$49,200

HASTENRATH, STEFAN L; INTERANNUAL VARIABILITY OF TROPICAL CLIMATE (ATM-8200511); 12 MONTHS \$60,500

SUOMI, VERNER E, SMITH, WILLIAM L, AND VIRGI, HASSAN; SATELLITE DERIVED EARTH AND ATMOSPHERE ENERGY BALANCE COMPONENTS DURING SUMMER MONEX (ATM-8205386); 12 MONTHS \$82,900

JOHNSON, DONALD R; PLANETARY SCALE DIABATIC HEATING AND TRANSPORT PROCESSES FOR ASIATIC MONSOON AND GLOBAL CIRCULATION (29M-8209757); 12 MONTHS \$77,700

YOUNG, JOHN A; LOW-LEVEL MONSOON WIND DYNAMICS (29M-8210229); 12 MONTHS \$120,700

UNIVERSITY OF WISCONSIN-MILWAUKEE

SIKDAR, DHIRENDRA N, AND MARTIN, DAVID W; A SATELLITE STUDY OF SOUTH CHINA SEA DISTURBANCES DURING WINTER MONEX (ATM-7815319 A02; 12 MONTHS \$73,500)

SIKDAR, DHIRENDRA N, AND MARTIN, DAVID W; CONVECTION OVER THE INDIAN OCEAN AND THE MONSOON CIRCULATION DURING SUMMER MONEX (ATM-7920850 A02; 12 MONTHS \$95,300)

WYOMING

UNIVERSITY OF WYOMING

HOFMANN, DAVID J, AND ROSEN, JAMES M; STUDY OF STRATOSPHERIC AEROSOL SOURCES AND FORMATION PROCESSES (ATM-8016866 A01; 12 MONTHS \$95,600)

HOFMANN, DAVID J, AND ROSEN, JAMES M; SUPPLEMENT TO STUDY OF STRATOSPHERIC AEROSOL SOURCES AND FORMATION PROCESSES (ATM-8016866 A02*); \$9,000

BOYER, DON L, LONG, ROBERT R, AND DAVIES, PETER A; LABORATORY AND THEORETICAL INVESTIGATIONS OF LEE CYCLOGENESIS (ATM-8018173*); 12 MONTHS \$77,000

VALL, GABOR; CLOUD PHYSICS STUDIES: WMO PRECIPITATION ENHANCEMENT PROJECT (ATM-8022549 A01*); 1 MONTHS \$11,593

VALL, GABOR, AND POLITOVICH, MARCIA; AIRCRAFT PROBING OF CONVECTIVE CLOUDS (ATM-8109007 A01); \$9,021

RODI, ALFRED R; AIRCRAFT STUDIES OF THE MICROPHYSICS OF DOWNDRAFTS TAKEN DURING THE JOINT AIRPORT WEATHER STUDIES (JAWS) EXPERIMENT (ATM-8205776); 12 MONTHS \$38,100

COOPER, WILLIAM A, AND VALL, GABOR; STUDIES OF ICE AND PRECIPITATION DEVELOPMENT WITHIN CCOPE (ATM-8211134); 12 MONTHS \$165,700

EARTH SCIENCES

ALABAMA

UNIVERSITY OF ALABAMA

THOMAS, WILLIAM A; VARIATION IN TIME OF OROGENY ALONG OROGENIC BELTS FROM THE PERSPECTIVE OF CLASTIC WEDGES (EAR-8109470 A01; 12 MONTHS \$36,200)

ALASKA

UNIVERSITY OF ALASKA FAIRBANKS CAMPUS-GEOPHYSICAL INSTITUTE

HARRISON, WILLIAM D; COLLABORATIVE RESEARCH ON SURGES OF VARIEGATED GLACIER (EAR-7919530 A02; 12 MONTHS \$44,300)

ROEDERER, JUAN G; EQUIPMENT FOR DIGITAL SCALING OF ANALOG GEOPHYSICAL RECORDS (EAR-8114404 A01*); \$5,166

ARIZONA

ARIZONA STATE UNIVERSITY

BUSCK, PETER R; SOLID STATE GEOCHEMISTRY: HIGH-RESOLUTION TRANSMISSION ELECTRON MICROSCOPY OF MINERALS (EAR-7926375 A02; 12 MONTHS \$133,000)

NAVROTSKY, ALEXANDRA; SILICATE GLASSES AND MELTS: THERMOCHEMICAL STUDIES (EAR-8022223 A01*); 12 MONTHS \$34,800

HOLLOWAY, JOHN R; INTERACTIONS OF VOLATILES WITH MAGMAS (EAR-8108748 A01; 12 MONTHS \$90,700)

SELF, STEPHEN; MOUNT ST. HELENS PYROCLASTIC FLOW DEPOSITS: EMPLACEMENT MECHANISMS AND FACIES ANALYSIS (EAR-8115844); 24 MONTHS \$31,426

KRINSLEY, DAVID H; WORKSHOP ON: CHARACTERIZATION AND QUANTIFICATION OF SURFACE FEATURES ON CLASTIC AND PYROCLASTIC PARTICLES (EAR-8116503); 12 MONTHS \$6,000

YUEN, DAVID A; A UNIFIED MODEL FOR MANTLE RHEOLOGY: GENERALIZED BURGERS' BODY (EAR-8117439); 12 MONTHS \$35,000

GRAF, WILLIAM L; SPATIAL AND TEMPORAL VARIABILITY IN FLUVIAL PROCESSES IN CANYONS OF THE CENTRAL COLORADO PLATEAU (EAR-8119932*); 12 MONTHS \$21,100

UNIVERSITY OF ARIZONA

HAYNES, C; LATE QUATERNARY GEOCHRONOLOGY (EAR-7926363 A02*); \$4,761

BIRD, DENNIS K, AND NORTON, DENIS L; TRANSPORT PROPERTIES OF THE SKAERGAARD MAGMA-HYDROTHERMAL SYSTEM (EAR-8007828 A01; 12 MONTHS \$53,000)

FERGUSON, C W; DENDROCHRONOLOGY OF BRISTLECONE PINE (EAR-8018687 A01*); 12 MONTHS \$20,000

BUTLER, ROBERT F; PALEOMAGNETISM AND ROCK-MAGNETISM OF LATE TERTIARY CONTINENTAL DEPOSITS, ARGENTINA (EAR-8115490); 24 MONTHS \$52,600

BULL, WILLIAM B; HORIZONTAL AND VERTICAL TECTONICS OF NEW ZEALAND - A GUIDE TO SEISMIC-HAZARDS INTERPRETATIONS (EAR-8115836*); 12 MONTHS \$26,927

DAMON, PAUL E; THE RADIOCARBON DIPOLE MOMENT: AN IMPROVED MODEL AND ITS EXTENSION THROUGH THE BRISTLECONE PINE CHRONOLOGY (EAR-8116196); 18 MONTHS \$60,000

BAKER, VICTOR R; HOLOCENE PALEOHYDROLOGY OF THE SOUTHWESTERN U.S. (EAR-8119981 A01); 12 MONTHS \$31,840

LINDSAY, EVERETT H, AND BUTLER, ROBERT F; MAGNETIC POLARITY STRATIGRAPHY OF TERRESTRIAL DEPOSITS OF THE LATEST CRETACEOUS AND PALEOCENE (EAR-8206262); 12 MONTHS \$43,200

DAMON, PAUL E; GEOCHRONOLOGY OF THE MESOZOIC-CENOZOIC VOLCANIC ARCS OF MEXICO AND ADJACENT U.S.A. AND RELATED ORE DEPOSITS (EAR-8206432); 12 MONTHS \$45,000

GANGULY, JIBAMITRA, AND GHOSE, SUBRATA; MG-FE₂ ORDER-DISORDER IN FERROMAGNETIC SILICATES AND THE COOLING HISTORY OF ROCKS (EAR-8206656); 12 MONTHS \$35,000

CALIFORNIA

CALIFORNIA INSTITUTE OF TECHNOLOGY

EPSTEIN, SAMUEL; OXYGEN, HYDROGEN, CARBON, AND SILICON ISOTOPE STUDIES OF NATURALLY OCCURRING MATERIALS (EAR-7816873 A02); 12 MONTHS \$167,500

TAYLOR, HUGH P; OXYGEN AND HYDROGEN ISOTOPE STUDIES OF IGNEOUS ROCKS AND ASSOCIATED HYDROTHERMAL METAMORPHISM (EAR-7816874 A02); 12 MONTHS \$126,500

AHRENS, THOMAS J; BOREHOLE MEASUREMENTS OF IN-SITU STRESS (EAR-7919740 A02); 12 MONTHS \$50,000

SALEEBY, JASON B; GEOCHRONOLOGICAL INVESTIGATION OF THE EARLY MESOZOIC SLALIC MARGIN OF THE SOUTHWEST CORDILLERA-SIERRA NEVADA REGION (EAR-8018811 A01); 12 MONTHS \$35,900

ANDERSON, DONALD L; DETERMINATION OF Q AND INVERSION OF ATTENUATION-CORRECTED GROSS EARTH DATA (EAR-8115236); 12 MONTHS \$101,630

KAMB, BARCLAY; FLOW MECHANICS OF GLACIERS ON MT. ST. HELENS AND RESPONSE TO THE EXPLOSION OF 18 MAY 1980 (EAR-8115722); 24 MONTHS \$55,631

HELMBERGER, DONALD V; LATERAL VARIATION IN UPPER MANTLE SHEAR VELOCITY (EAR-8115986); 12 MONTHS \$48,000

KANAMORI, HIROO; SEISMOLOGICAL STUDIES ON THE NATURE OF PLATE BOUNDARIES AT SUBDUCTION ZONES (EAR-8116029); 12 MONTHS \$50,000

AHRENS, THOMAS J; SHOCK TEMPERATURES IN GEOLOGICAL MATERIALS (EAR-8116096); 12 MONTHS \$65,000

KIRSCHVINK, JOSEPH L; PALEOMAGNETISM AND MAGNETIC STRATIGRAPHY OF THE PRECAMBRIAN - CAMBRIAN BOUNDARY (EAR-8121377); 12 MONTHS \$50,000

BURNETT, DONALD S; TRACE ELEMENT MICROANALYSIS WITH EMPHASIS ON METEORITE STUDIES (EAR-8121381); 12 MONTHS \$84,469

SALEEBY, JASON B; GEOCHRONOLOGICAL INVESTIGATIONS OF OPHIOLITIC AND RELATED VOLCANO-PLUTONIC ARC ASSEMBLAGES OF WESTERN SIERRA NEVADA-KLAMATH MOUNTAIN, NORTHERN CALIFORNIA AND SOUTHERN OREGON (EAR-8206382); 12 MONTHS \$56,400

STEVENSON, DAVID J; CORE PHYSICS (EAR-8206383); 12 MONTHS \$30,000

HAGER, BRADFORD H; STUDY OF THE DYNAMICS OF SUBDUCTED SLABS (EAR-8206532); 12 MONTHS \$36,000

ROCKWELL INTERNATIONAL CORPORATION

TITTMANN, BERNHARD R, AND ABDEL-GAWAD, M; ATTENUATION AND VELOCITY OF OCEANIC CRUSTAL ROCKS (EAR-8019966 A01); 12 MONTHS \$48,003

SAN DIEGO STATE UNIVERSITY

FROST, ERIC G; TERTIARY DETACHMENT FAULTING & THE VINCENT-OROCOPA THRUST: THEIR INTERRELATIONSHIPS & IMPLICATIONS FOR THE TECTONIC DEVELOPMENT OF SOUTHERN CALIFORNIA AND WESTERN ARIZONA (EAR-8121501); 12 MONTHS \$38,834

GASTIL, R GORDON, AND MILLER, RICHARD H; PALEOZOIC AND LOWER MESOZOIC STRATIGRAPHY AND PALEOGEOGRAPHY OF PENINSULAR CALIFORNIA (EAR-8205898); 12 MONTHS \$52,400

S-CUBED

MINSTER, J BERNARD, AND RODI, WILLIAM L; PN ANISOTROPY AND SUBCRUSTAL DEVIATORIC STRESS IN SOUTHERN CALIFORNIA (EAR-8115856); 12 MONTHS \$45,868

STANFORD UNIVERSITY

BROWN, GORDON E; STRUCTURAL STUDIES OF ALUMINOSILICATE MELTS AND GLASSES (EAR-8016911 A01); 12 MONTHS \$58,303

NUR, AMOS M; WAVE ATTENUATION IN ROCKS UNDER CRUSTAL CONDITIONS: EFFECTS OF HIGH TEMPERATURE AND PORE PRESSURE (EAR-8018346 A01); 12 MONTHS \$45,700

MILLER, ELIZABETH L, AND LARUE, DAVID K; CONTINENTAL MARGIN PALEOGEOGRAPHY AND TECTONICS, NORTHEASTERN NEVADA (EAR-8018763 A01); 12 MONTHS \$34,827

GELLER, ROBERT J; A NEW ITERATIVE METHOD FOR FINDING THE NORMAL MODES OF A LATERALLY HETEROGENEOUS EARTH, AND RELATED OBSERVATIONAL STUDIES (EAR-8019463 A01); 12 MONTHS \$51,900

NUR, AMOS M; THE ROLE OF ACCRETED OCEANIC PLATEAUS IN THE TECTONICS OF ACTIVE MARGINS (EAR-8025879 A01); 12 MONTHS \$50,000

COX, ALLAN V; PALEOMAGNETIC TEST OF A POSSIBLE ROTATION OF THE SIERRA NEVADA (EAR-8107702 A01); 12 MONTHS \$49,728

LARUE, DAVID K; SEDIMENTARY, STRUCTURAL AND CHEMICAL EVOLUTION OF A PURPORTED CONTINENTAL MARGIN OF EARLY PROTEROZOIC AGE, LAKE SUPERIOR REGION (EAR-8108564 A01); 12 MONTHS \$35,200

GELLER, ROBERT J; SEISMOLOGICAL STUDIES OF TECTONIC PROCESSES (EAR-8108718 A01); 12 MONTHS \$45,000

THOMPSON, GEORGE A, AND CLAERBOUT, JON F; WAVE EQUATION MIGRATION AND GEOLOGIC INTERPRETATION OF DEEP CRUSTAL SEISMIC REFLECTION PROFILES (EAR-8109294 A01); 12 MONTHS \$60,000

SLEEP, NORMAN H; LITHOSPHERIC DYNAMICS AT PLATE BOUNDARIES (EAR-8115522*); 24 MONTHS \$85,000

MAHOOD, GAIL A; A RE-EXAMINATION OF THE GEOLOGIC HISTORY OF PANTELLERIA, STRAIT OF SICILY, AND ITS IMPLICATIONS FOR THE PETROGENESIS OF STRONGLY PERALKALINE MAGMAS (EAR-8121380); 12 MONTHS \$36,000

LIU, JUHN G; SYNTHESIS, STABILITIES AND ELEMENT DISTRIBUTION OF MINERALS UNDER HYDROTHERMAL CONDITIONS (EAR-8204288); 12 MONTHS \$70,000

BROWN, GORDON E; MICROCHEMICAL ANALYSIS OF SYNTHETIC AND NATURAL PHASES BY ELECTRON MICROPROBE TECHNIQUES (EAR-8206380); 12 MONTHS \$100,000

MILLER, ELIZABETH L; MID-TERTIARY FAULTING AND VOLCANISM IN EAST-CENTRAL NEVADA: EXTENSIONAL TECTONICS IN A CONTINENTAL ARC SETTING (EAR-8206399); 12 MONTHS \$37,818

UNIVERSITY OF CALIFORNIA SYSTEM OFFICE

ALVAREZ, WALTER; A SCIENTIFIC STUDY OF POSSIBLE EXTRATERRESTRIAL CAUSES OF REPETITIVE LIFE EXTINCTIONS ON THE EARTH (EAR-8115858*); 12 MONTHS \$49,076

UNIVERSITY OF CALIFORNIA, BERKELEY

BUKOWINSKI, MARK; THEORETICAL STUDIES OF BONDING OXIDES AND COMPOUNDS OF THE ALKALI METALS (EAR-8008214 A01); 12 MONTHS \$59,900

CURTIS, GARNISS H; GEOCHRONOLOGY AND EVOLUTION OF IGNEOUS ROCKS IN CENTRAL CHILE (LAT. 33-36 S) (EAR-8018354 A01); 12 MONTHS \$49,000

ALVAREZ, WALTER, AND WENK, HANS-RUDO; INTEGRATED STRUCTURAL STUDY OF THE UMBRIAN APENNINES: A COMPACT FORELAND FOLD AND THRUST BELT (EAR-8022846 A01); 12 MONTHS \$34,051

CARMICHAEL, IAN S; STUDIES IN VOLCANIC PETROLOGY (EAR-8103344 A01); \$92,854

CARMICHAEL, IAN S; STUDIES IN VOLCANIC PETROLOGY (EAR-8103344 A02); 12 MONTHS \$107,000

WRIGHT, JAMES E; PERMO-TRIASSIC ACCRETIONARY SUBDUCTION COMPLEX, SOUTHWESTERN KLAMATH MOUNTAINS, NORTHERN CALIFORNIA (EAR-8107735 A01); 12 MONTHS \$28,792

JEANLOZ, RAYMOND; HIGH PRESSURE EXPERIMENTS PERTAINING TO THE STATE OF THE LOWER MANTLE (EAR-8108592*); 12 MONTHS \$95,000

HELGESON, HAROLD C; THEORETICAL INVESTIGATION OF GEOCHEMICAL PROCESSES (EAR-8115859); 12 MONTHS \$122,000

HELGESON, HAROLD C; THEORETICAL INVESTIGATION OF GEOCHEMICAL PROCESSES (EAR-8115859 A01); 12 MONTHS \$132,800

BRIMHALL, GEORGE H; GEOCHEMICAL MECHANISMS OF ELEMENT REDISTRIBUTION IN THE HYDROTHERMAL PORPHYRY COPPER ENVIRONMENT: PRINCIPLES AND TECHNOLOGICAL APPLICATIONS (EAR-8115907); 12 MONTHS \$75,800

CLEMENS, WILLIAM A; THE CRETACEOUS-TERTIARY TRANSITION FROM A TERRESTRIAL VIEWPOINT (DEB-8119217*); 12 MONTHS \$15,000

JOHNSON, LANE R; VELOCITY ANOMALIES IN THE EARTH'S LOWER MANTLE (EAR-8121648); 12 MONTHS \$40,000

WENK, HANS-RUDO; SYMPOSIUM ON ROCK MECHANICS, BERKELEY, 1982 (EAR-8204591); 4 MONTHS \$3,600

BOLT, BRUCE A; TAIWAN LARGE-SCALE STRONG-MOTION ARRAY PROJECT (EARTHQUAKE ENGINEERING) (CEE-8204672*); 12 MONTHS \$9,000

WENK, HANS-RUDO; TEXTURE DEVELOPMENT IN LIMESTONES DEFORMED AT LOW SYMMETRY: EXPERIMENT AND THEORY (EAR-8207727); 12 MONTHS \$32,075

ISAAC, GLENN L; MULTI-USER EQUIPMENT PURCHASE (BNS-8213704*); 12 MONTHS \$2,000

UNIVERSITY OF CALIFORNIA, DAVIS

TAYLOR, BRUCE E; LIGHT STABLE ISOTOPE STUDY OF HYDROTHERMAL FLUIDS AND ORE FORMATION IN THE MOTHER LODE AND NORTHERN SIERRA NEVADA GOLD DISTRICTS (EAR-7913238 A01); \$2,000

GREEN, HARRY W; THE EFFECT OF CO₂ ON THE PLASTICITY OF OLIVINE (EAR-8025490 A02); 12 MONTHS \$40,000

VEROSUB, KENNETH L; THE NATURE OF POST-DEPOSITIONAL DETRITAL REMANENT MAGNETISM (EAR-8109467); 24 MONTHS \$70,000

VEROSUB, KENNETH L; INVESTIGATIONS OF NEOTECTONIC PROCESSES IN THE SOUTHERN DEATH VALLEY REGION (EAR-8116731); 24 MONTHS \$65,000

VEROSUB, KENNETH L; NEW APPLICATIONS OF PALEOMAGNETISM TO THE STUDY OF ACTIVE FAULTS (EAR-8121189); 12 MONTHS \$39,990

UNIVERSITY OF CALIFORNIA, LOS ANGELES

BOETTCHER, ARTHUR L; GEOCHEMICAL AND HIGH-PRESSURE STUDIES OF THE CRUST-MANTLE SYSTEM OF THE EARTH AND OTHER TERRESTRIAL PLANETS (EAR-7816413 A04); 12 MONTHS \$160,900

ERNST, WALLACE G; EXPERIMENTAL STUDIES OF ULTRAMAFIC AND MAFIC PHASE EQUILIBRIA IN SYNTHETIC AND NATURAL SYSTEMS TO 10 KB UNDER CONTROLLED LABORATORY CONDITIONS (EAR-7923615 A02); 12 MONTHS \$38,200

DE NIRO, MICHAEL J; ANALYSIS OF BIOLOGICAL PROCESSES WHICH AFFECT CLIMATIC RECONSTRUCTION BASED ON STABLE ISOTOPE RATIOS OF TREE RINGS (ATM-7924591 A02*); 12 MONTHS \$7,300

- LOEBLICH, HELEN T. AND LOEBLICH, ALFRED R. SUPRAGENERIC RECLASSIFICATION OF THE FORAMINIFERIDA (PROTOZOA) (DEB-800805 A01); 12 MONTHS \$15,000
- ERNST, WALLACE G. INTEGRATED EXPERIMENTAL PHASE EQUILIBRIUM, FIELD, X R F, S E M, AND MICROPROBE INVESTIGATION OF METAMORPHIC AND IGNEOUS PROCESSES IN MESOZOIC CALIFORNIAN ARCS (EAR-8017295 A01); 12 MONTHS \$57,400
- DAVIS, PAUL M. ELECTRIC AND MAGNETIC MONITORING OF MT. ST. HELENS VOLCANO (EAR-8026450 A01); 12 MONTHS \$50,000
- WASSON, JOHN T. NEBULAR FRACTIONATION, CLASSIFICATION AND FORMATION LOCATIONS OF CHONDRITIC METEORITES (EAR-8026464 A01); 12 MONTHS \$53,000
- CHRISTIE, JOHN M. RHEOLOGICAL, MICROSTRUCTURAL AND MICROCHEMICAL STUDIES OF DEFORMED ROCKS (EAR-8115683); 12 MONTHS \$51,200
- KNOPOFF, LEON. CRACK FUSION DYNAMICS (EAR-8116903); 12 MONTHS \$45,000
- ANDERSON, ORSON L. MEASURING THE THERMAL PRESSURE OF MINERALS AT HIGH TEMPERATURE (EAR-8119547); 12 MONTHS \$60,000
- SHREVE, RONALD L. ESKER FORMATION AND INTERPRETATION (EAR-8121051); 12 MONTHS \$12,600
- BUSSE, FRIEDRICH H. DYNAMICS OF THE EARTH'S INTERIOR AND THE GEODYNAMO (EAR-8205668); 12 MONTHS \$43,400
- DE PAOLO, DONALD J. K-CA: GEOCHRONOLOGICAL, GEOCHEMICAL AND MINERALOGICAL STUDIES USING NATURAL VARIATIONS OF $\delta^{18}O_{CA}$ (EAR-8206092); 12 MONTHS \$40,000
- BIRD, G. PETER. FREE OSCILLATION CALCULATIONS AND TESTING OF LATERALLY HETEROGENEOUS EARTH MODELS (EAR-8206101); 12 MONTHS \$83,000
- UNIVERSITY OF CALIFORNIA, RIVERSIDE
- STIERMAN, DONALD J. IN SITU STUDIES OF SEISMIC WAVE VELOCITIES AND ATTENUATION IN BASEMENT ROCKS IN SOUTHERN CALIFORNIA (EAR-7926331 A02); 12 MONTHS \$46,000
- SCHIFFMAN, PETER. HYDROTHERMAL ALTERATION AND OXYGEN ISOTOPIC GEOCHEMISTRY OF THE DEL PUERTO OPHIOLITE (EAR-8206166); 12 MONTHS \$19,800
- UNIVERSITY OF CALIFORNIA, SAN DIEGO-SCRIPPS INSTITUTION OF OCEANOGRAPHY
- PARKER, ROBERT L. EXACT NONLINEAR INVERSION OF ELECTRICAL SOUNDINGS (EAR-7919467 A01); 24 MONTHS \$40,000
- REVELLE, ROGER. SUPPORT FOR A SCIENTIFIC SECRETARY FOR THE COMMITTEE ON CLIMATE CHANGE AND THE OCEAN (CCCO) OF THE SCIENTIFIC COMMITTEE ON OCEAN RESEARCH (SCOR) (OCE-7925973 A03); 12 MONTHS \$65,000
- MACDOUGALL, J. DOUGLAS, AND LUGMAIR, GUNTER W. ISOTOPIC INVESTIGATIONS OF CONTINENTAL FLOOD BASALTS AND ULTRAMAFIC XENOLITHS FROM ALKALI BASALTS AND KIMBERLITES (EAR-8009231 A01); 12 MONTHS \$68,900
- GOLDBERG, EDWARD D. CHARCOAL AS A SINK FOR CARBON IN THE GLOBAL CARBON DIOXIDE CYCLE (EAR-8017491 A01); 12 MONTHS \$33,200
- CRAIG, HARMON. CONTINENTAL AND CONVERGENT MARGIN VOLCANISM: ISOTOPIC STUDIES OF RARE GASES, CARBON, HYDROGEN, AND NITROGEN IN FLUIDS AND ROCKS (EAR-8018784 A01); 12 MONTHS \$76,400
- GILBERT, J. FREEMAN. DENSITY STRUCTURE OF THE EARTH'S DEEP INTERIOR AND A GEOPHYSICAL DETERMINATION OF THE GRAVITATIONAL CONSTANT (EAR-8025261 A01); 12 MONTHS \$98,800
- MACDOUGALL, J. DOUGLAS. MAGMA EVOLUTION AND CHRONOLOGY FOR CASCADE VOLCANOES (EAR-8026448 A01); 12 MONTHS \$57,300
- ENGEL, ALBERT E. LATE MESOZOIC-CENOZOIC TECTONIC ALONG THE SALTON THOUGH PENINSULAR RANGE BOUNDARY (EAR-8110867 A01); 12 MONTHS \$40,000
- FILLOUX, JEAN H. SEAFLOOR MAGNETOTELLURIC EXPLORATION: WESTERN PACIFIC STUDIES (OCE-811705*; 12 MONTHS \$42,800
- WYATT, FRANK. PRECISION MEASUREMENTS OF CRUSTAL DEFORMATION (EAR-8115532); 12 MONTHS \$69,700
- GILBERT, J. FREEMAN, AND JORDAN, THOMAS H. SOURCE MECHANISMS OF EARTHQUAKES FROM FREE OSCILLATION DATA (EAR-8121866); 12 MONTHS \$100,000
- GILBERT, J. FREEMAN. SYMPOSIUMS ON MATHEMATICAL GEOPHYSICS (EAR-8203991); 6 MONTHS \$10,000
- BRUNE, JAMES N. INVERSION OF EARTHQUAKE GROUND MOTION FOR DYNAMIC FAULT SLIP (EAR-8206385); 12 MONTHS \$50,000
- UNIVERSITY OF CALIFORNIA, SAN DIEGO
- GOOD AND, JOHN M. THE APPLICATION OF THE SUPERCONDUCTING GRAVIMETER TO IMPROVE MODELING OF THE OCEAN TIDES AND SOLID EARTH (EAR-8018760 A01); 12 MONTHS \$55,000
- BRUNE, JAMES N. LONG PERIOD SEISMOGRAPH ARRAY FOR CRUST AND MANTLE STUDIES IN MEXICO (EAR-8107681); 12 MONTHS \$60,000
- COX, CHARLES C. AND CHAVE, ALAN D. MANTLE CONDUCTIVITY FROM INDUCTION BY OCEAN TIDES (EAR-8120949); 12 MONTHS \$35,000
- BERGER, JONATHAN, GILBERT, J. FREEMAN, AND AGNEW, DUNCAN C. PROJECT IDA: A GLOBAL RESEARCH NETWORK FOR VERY LONG PERIOD SEISMOLOGY (EAR-8121024); 12 MONTHS \$160,500
- UNIVERSITY OF CALIFORNIA, SANTA BARBARA
- TILTON, GEORGE R. EARLY HISTORY OF THE SOLAR SYSTEM (EAR-7925983 A01); 45 MONTHS \$62,065
- MATTINSON, JAMES M. U-PB ISOTOPIC INVESTIGATIONS OF IGNEOUS AND METAMORPHIC BASEMENT ROCKS OF THE SALINIAN BLOCK OF CALIFORNIA (EAR-8008215 A02); 22 MONTHS \$55,542
- PROTHERO, WILLIAM A. STRUCTURE OF THE OCEANIC LITHOSPHERE FROM TELESEISMIC MONITORING WITH OCEAN BOTTOM SEISMOMETERS (EAR-8018680 A01); 12 MONTHS \$60,000
- FULLER, MICHAEL D. PALEOMAGNETISM OF CHINA (EAR-8115660); 24 MONTHS \$90,000
- CROWELL, JOHN C. BASEMENT THRUSTS OF SOUTHERN CALIFORNIA (EAR-8115790); 24 MONTHS \$75,000
- LUYENDYK, BRUCE P. PALEOMAGNETISM AND TECTONICS OF THE SOUTHERN CALIFORNIA BORDERLAND AND TRANSVERSE RANGES (EAR-8116507); 12 MONTHS \$47,000
- VALENTINE, JAMES W. DEVELOPMENTAL STRATEGIES IN NEOGENE BENTHIC MARINE INVERTEBRATES IN THE NORTHEASTERN PACIFIC (EAR-8121212); 24 MONTHS \$39,500
- DODSON, RICHARD. ARCHEOMAGNETIC MEASUREMENT OF RECENT SECULAR VARIATION IN PERU (EAR-8121389); 6 MONTHS \$30,000
- MALIN, PETER E. COMPLETION OF A THEORETICAL AND OBSERVATIONAL INVESTIGATION OF FIRST ORDER SURFACE WAVE SCATTERING (EAR-8205857); 12 MONTHS \$24,900
- FISHER, RICHARD V. BLAST PYROCLASTIC-FLOW DEPOSITS, MOUNT ST. HELENS, WASHINGTON (EAR-8205868); 12 MONTHS \$46,358
- FULLER, MICHAEL D. PALEOMAGNETISM OF PHILIPPINES AND MARIANAS: EVOLUTION OF AN ACCRETIONARY MARGIN (EAR-8205869); 12 MONTHS \$52,671
- UNIVERSITY OF CALIFORNIA, SANTA CRUZ
- COE, ROBERT S. DETAILED BEHAVIOR OF THE COMPLETE FIELD VECTOR DURING A GEOMAGNETIC REVERSAL (EAR-8100395 A01); \$10,100
- CAMERON, KENNETH L. GEOLOGY AND GEOCHEMISTRY OF TERTIARY VOLCANIC ROCKS FROM NORTHWESTERN MEXICO AND ADJACENT WEST TEXAS (EAR-8115285); 24 MONTHS \$79,000
- MOORE, J. CASEY, AND COE, ROBERT S. ACCRETION, COLLISION, AND TECTONIC EVOLUTION, N. BRISTOL BAY ALASKA (EAR-8115528); 24 MONTHS \$109,127
- CAMERON, KENNETH L. VOLCANO-TECTONIC EVOLUTION OF THE DEVILS GARDEN LAVA FIELD (EAR-8119780); 12 MONTHS \$16,400
- COE, ROBERT S. PALEOMAGNETIC STUDIES IN MAJOR TECTONIC ELEMENTS OF EASTERN CHINA (EAR-8120368); 24 MONTHS \$63,518
- COE, ROBERT S. PALEOMAGNETIC STUDY OF THE PENINSULA TERRANE (EAR-8206198); 12 MONTHS \$50,000
- TOBISCH, OTHMAR T. STRUCTURAL EVOLUTION OF THE INDUS SUTURE ZONE NEAR LAMAYURU, LADAKH, NORTHWESTERN HIMALAYA (EAR-8206478); 12 MONTHS \$31,183
- UNIVERSITY OF SOUTHERN CALIFORNIA
- TENG, TA-LIANG. LATERAL INHOMOGENEITIES OF THE CRUST AND UPPER MANTLE IN THE EURASIAN AND PACIFIC PLATES (EAR-8025723 A01); 12 MONTHS \$47,000
- MALIN, PETER E. AND HENVEY, THOMAS L. TWO PART STUDY OF THE SEISMIC REFLECTION STRUCTURE ADJACENT TO THE SAN ANDREAS FAULT, PALMDALE, CALIFORNIA (EAR-8116277); 12 MONTHS \$66,200
- ANDERSON, JAMES L. A PETROLOGIC INVESTIGATION ACROSS THE CORDILLERAN METAMORPHIC COMPLEX BELT IN SOUTHERN CALIFORNIA AND ADJACENT ARIZONA (EAR-8120880); 12 MONTHS \$37,819
- DAVIS, GREGORY A. FABRIC AND MICROSTRUCTURAL ANALYSIS OF MYLONITIC ROCKS, WHIPPLE MOUNTAINS, CALIFORNIA, AND RUBY MOUNTAINS, NEVADA (EAR-8121188); 12 MONTHS \$12,964
- LEARY, PETER C. AND HENVEY, THOMAS L. INVESTIGATION OF THE TECTONIC TILT SENSITIVITY OF THE LOS ANGELES AQUEDUCT (EAR-8121467); 12 MONTHS \$20,000
- SAMMIS, CHARLES G. AND HAMMOND, DOUGLAS E. AN EXPERIMENTAL STUDY OF THE EMANATION OF RADON AND OTHER GASES FROM STRESSED ROCK (EAR-8121641); 12 MONTHS \$41,300
- COLORADO
- COLORADO SCHOOL OF MINES
- APPLEGATE, JAMES K. WIDE ANGLE REFLECTIONS IN THE INVESTIGATION OF THE POSSIBLE CONTINUITY OF SUBSURFACE STRUCTURE ACROSS THE SAN ANDREAS FAULT ZONE, CALIFORNIA (EAR-8116278); 12 MONTHS \$61,900
- GEISSMAN, JOHN W. PALEOMAGNETIC INVESTIGATIONS OF THE STILLWATER COMPLEX AND ASSOCIATED UNITS, BEARTOOTH RANGE, MONTANA (EAR-8116427); 24 MONTHS \$63,929
- ROSS, REUBEN J. SEDIMENTARY CYCLES, UNCONFORMITY, AND THE LOWER-MIDDLE ORDOVICIAN BOUNDARY: CENTRAL NEVADA VS. WESTERN NEWFOUNDLAND (EAR-8117322); 24 MONTHS \$55,524
- HOLDEN, GREGORY S. STUDENT PARTICIPATION IN ARCHEAN GEOCHEMISTRY FIELD CONFERENCE, 1982 (EAR-8208310); 2 MONTHS \$3,000
- GEOLOGICAL SOCIETY OF AMERICA
- PALMER, ALLISON R. DECADE OF NORTH AMERICAN GEOLOGY - SYNTHESIS VOLUME WORKSHOPS (EAR-8120909); 9 MONTHS \$18,080
- NATIONAL OCEANIC ATMOSPHERIC ADMINISTRATION-NATIONAL GEOPHYSICAL & SOLAR-TERRESTRIAL DATA
- LOUGHBRIDGE, MICHAEL S. DATA MANAGEMENT SERVICES FOR THE INTERNATIONAL DECADE OF OCEAN EXPLORATION (OCE-8022364 A02); 12 MONTHS \$24,494
- UNIVERSITY OF COLORADO AT BOULDER
- WYSS, MAX. THE HAWAII, M-7.5, 1975 EARTHQUAKE: COMPARISON OF THE MAIN SHOCK MULTIPLE RUPTURE WITH THE ASPERITY DISTRIBUTION DERIVED FROM PRECURSORS (EAR-8115842); 12 MONTHS \$45,000

ARCHAMBEAU, CHARLES B. AND LEMMON, J. J.; INVESTIGATION OF SEISMIC WAVE PROPAGATION IN ALMOST STRATIFIED MEDIA USING NORMAL MODE SYNTHETICS (EAR-811595); 24 MONTHS \$75,000

ANDREWS, JOHN T. AND MILLER, GIFFORD H.; LATE QUATERNARY CHRONOLOGY OF THE CENTRAL AND EASTERN REGIONS OF THE LAURENTIDE ICE SHEET (EAR-812129); 12 MONTHS \$46,400

MILLER, GIFFORD H.; DOCTORAL DISSERTATION RESEARCH IN EARTH SCIENCES (EAR-8205635); 12 MONTHS \$6,300

KLIGFIELD, ROY; FINITE STRAIN ANALYSIS OF CORE-COMPLEX TECTONITES (EAR-8206040); 12 MONTHS \$39,976

CONNECTICUT

UNIVERSITY OF CONNECTICUT-MARINE SCIENCES INSTITUTE

WASLENCHUK, DENNIS G.; THE GEOCHEMISTRIES OF THE METALLOIDS ARSENIC, ANTIMONY, BISMUTH, GERMANIUM AND SELENIUM IN U.S. RIVERS (EAR-8025505 A01); 12 MONTHS \$53,498

UNIVERSITY OF CONNECTICUT

GEISER, PETER; COLLABORATIVE STRUCTURAL AND GEOCHRONOLOGIC INVESTIGATION OF ALLEGHENIAN DEFORMATIONAL EVENTS IN THE CENTRAL AND NORTHERN APPALACHIAN FORELAND (EAR-8207355); 12 MONTHS \$32,880

WESLEYAN UNIVERSITY

PATTON, PETER C.; SEDIMENT TRANSPORT AND DISPERSAL IN THE CONNECTICUT RIVER ESTUARY (EAR-8115905); 24 MONTHS \$88,335

YALE UNIVERSITY

OKAL, EMILE A.; SEISMOLOGICAL INVESTIGATIONS OF PROBLEMS IN GEODYNAMICS (EAR-8106106 A01); 12 MONTHS \$43,000

TRACY, ROBERT J.; METAMORPHIC STUDIES IN THE NORTHERN APALACHIANS (EAR-8120670); 12 MONTHS \$53,900

BRADBURY, HARRY J. AND RYE, DANNY M.; FLUID-ROCK INTERACTIONS AND LOW TEMPERATURE DEFORMATION MECHANISMS (EAR-8200324); 12 MONTHS \$61,900

DISTRICT OF COLUMBIA

AMERICAN GEOPHYSICAL UNION

SPIHLHAUS, A. F.; GROUP TRAVEL FOR U.S. PARTICIPANTS IN THE GENERAL MEETING OF THE INTERNATIONAL ASSOCIATION OF GEODESY, TOKYO, JAPAN MAY 7-20, 1982 (EAR-8118330); 12 MONTHS \$6,000

SPIHLHAUS, A. F.; TRAVEL SUPPORT FOR U.S. PARTICIPATION IN THE FIRST SCIENTIFIC ASSEMBLY OF THE INTERNATIONAL ASSOCIATION OF HYDROLOGICAL SCIENCES (EAR-8207196); 12 MONTHS \$7,080

SPIHLHAUS, A. F.; TRAVEL OF STUDENTS AND FOREIGN SCIENTISTS TO A CHAPMAN CONFERENCE ON FAULT BEHAVIOR AND THE EARTHQUAKE GENERATION PROCESS (EAR-8208697); 12 MONTHS \$10,000

SPIHLHAUS, A. F.; TRAVEL OF STUDENTS AND FOREIGN SCIENTISTS TO A CHAPMAN CONFERENCE ON POINT DEFECTS IN MINERALS (EAR-8208698); 12 MONTHS \$5,000

CARNEGIE INSTITUTION OF WASHINGTON

BELL, PETER M. AND MAO, HO-KWANG; EXPERIMENTAL STUDY OF THE EARTH'S MANTLE AND MANTLE-CORE BOUNDARY (EAR-8008804 A02); 12 MONTHS \$64,900

FINGER, LARRY W. AND HAZEN, ROBERT M.; MINERAL PHYSICS: RELATIONSHIP BETWEEN CRYSTAL STRUCTURE AND PHYSICAL PROPERTIES OF MINERALS AT HIGH TEMPERATURES AND PRESSURE (EAR-8115517); 12 MONTHS \$57,600

LEE, TYPHOON; TRACING THE NUCLEAR ASTROPHYSICAL ORIGIN OF SOLAR SYSTEM MATTER: A LABORATORY STUDY OF ISOTOPIC ANOMALIES (AST-8115972); 24 MONTHS \$35,000

SACKS, I. S. AND LINDE, ALAN T.; STRUCTURE OF THE SUBDUCTION ZONES BENEATH WESTERN SOUTH AMERICA (EAR-8116796); 24 MONTHS \$83,400

BOYD, FRANCIS R.; XENOLITHS AND MEGACRYSTS FROM CIRCUMCRATONIC KIMBERLITES OF SOUTHERN AFRICA; THEIR BEARING ON THE STRUCTURE AND HISTORY OF THE UPPER MANTLE (EARTH SCIENCES) (EAR-8120832); 12 MONTHS \$35,750

JAMES, DAVID E.; OXYGEN AND RADIOGENIC ISOTOPIC STUDIES OF OCEANIC ISLAND BASALTS (EAR-8121213); 24 MONTHS \$47,119

RUMBLE, DOUGLAS; ORIGIN OF GRAPHITE VEIN DEPOSITS OF NEW HAMPSHIRE (EAR-8206017); 12 MONTHS \$31,700

CARLSON, RICHARD W.; CHEMICAL AND ISOTOPIC INVESTIGATION OF LATE-CENOZOIC VOLCANICS FROM THE NORTHWESTERN UNITED STATES (EAR-8206708); 24 MONTHS \$4,500

MAO, HO-KWANG, AND BELL, PETER M.; EXPERIMENTAL STUDY OF THE EQUATION OF STATE OF MANTLE MINERALS (EAR-8206839); 12 MONTHS \$49,342

GOETTEL, KENNETH A.; DIAMOND ANVIL PRESSURE CELL EXPERIMENTS ON MATERIALS OF GEOPHYSICAL INTEREST (EAR-8216499); 12 MONTHS \$45,850

CATHOLIC UNIVERSITY OF AMERICA

MCCOY, JOHN J.; PARABOLIC PROPAGATION MODELS FOR GEOPHYSICAL APPLICATIONS (EAR-8025367 A01); 12 MONTHS \$41,600

COURTESY TRAVEL SERVICE

LYNCH, LOUISE; TRAVEL AND ADMINISTRATIVE SERVICES IN SUPPORT OF INTERNATIONAL SCIENCE ACTIVITIES SPONSORED BY THE NATIONAL SCIENCE FOUNDATION (89T-8018782 A06*); 12 MONTHS \$10,000

LYNCH, LOUISE; TRAVEL AND ADMINISTRATIVE SERVICES IN SUPPORT OF INTERNATIONAL SCIENCE ACTIVITIES SPONSORED BY THE NATIONAL SCIENCE FOUNDATION (02T-8018782 A08*); \$18,000

LYNCH, LOUISE; TRAVEL AND ADMINISTRATIVE SERVICES IN SUPPORT OF INTERNATIONAL SCIENCE ACTIVITIES SPONSORED BY THE NATIONAL SCIENCE FOUNDATION (95T-8018782 A12*); 8 MONTHS \$55,000

GEORGE WASHINGTON UNIVERSITY

LEWIS, JOHN F.; GEOLOGICAL INVESTIGATIONS IN THE CENTRAL DOMINICAN REPUBLIC (INT-8116073*); 24 MONTHS \$34,864

COATES, ANTHONY G.; GEOLOGY AND BIOLOGY OF THE CNIDARIA, FOURTH INTERNATIONAL SYMPOSIUM, WASHINGTON, D.C., AUGUST 7-13, 1983 (EAR-8116559); 24 MONTHS \$6,986

NATIONAL ACADEMY OF SCIENCES

HART, PEMBROKE J.; SUPPORT OF THE GEOPHYSICS RESEARCH BOARD (GRB) AND THE COMMITTEE ON SOLAR-TERRESTRIAL RESEARCH (GSTR) (ATM-7914131 A04*); \$5,500

BERG, JOSEPH W.; PARTIAL SUPPORT OF THE GEOLOGICAL SCIENCES BOARD (EAR-8118092 A01); \$10,000

BERG, JOSEPH W.; PARTIAL SUPPORT OF THE GEOLOGICAL SCIENCES BOARD (EAR-8118092 A03*); 12 MONTHS \$25,000

HART, PEMBROKE J.; SUPPORT OF THE U.S. GEODYNAMICS COMMITTEE (EAR-8121999); 12 MONTHS \$50,000

HART, PEMBROKE J.; SUPPORT OF THE GEOPHYSICS RESEARCH BOARD (GRB) AND THE COMMITTEE ON SOLAR-TERRESTRIAL RESEARCH (GSTR) (02M-8122143*); 12 MONTHS \$11,000

KATSOUROU, MARY HOPE; CONTINUATION SUPPORT FOR THE OCEAN POLICY COMMITTEE (OCE-8204126); 12 MONTHS \$40,000

KATSOUROU, MARY HOPE; CONTINUATION SUPPORT FOR THE OCEAN POLICY COMMITTEE (29E-8204126 A01); \$10,000

NATIONAL ACADEMY OF SCIENCES-NATIONAL RESEARCH COUNCIL

BERG, JOSEPH W.; STUDY ON GEOLOGICAL SCIENCES IN THE 1980'S (EAR-8215464); 12 MONTHS \$17,762

FLORIDA

FLORIDA STATE UNIVERSITY

SOMMER, MICHAEL A.; COLLABORATIVE RESEARCH ON THE ROLES OF VOLATILES IN LESSER ANTIILLES ISLAND ARC MAGMAS (EAR-8026736 A01); \$4,298

LOPER, DAVID E.; A STUDY OF THE NATURE AND CONSEQUENCES OF A DENDRITIC INNER CORE BOUNDARY IN THE EARTH (EAR-8103342 A01); 12 MONTHS \$50,000

TULL, JAMES F.; TECTONIC DEVELOPMENT OF THE TALLADEGA SLATE BELT (EAR-8109056 A01); 12 MONTHS \$33,031

UNIVERSITY OF FLORIDA

OPDYKE, NEIL D.; PALEOMAGNETISM OF PALEOZOIC ROCKS IN NORTHERN FLORIDA AND THE SOUTHERN APPALACHIANS, & REGIONAL TECTONIC IMPLICATIONS (EAR-8206421); 12 MONTHS \$30,000

MAC FADDEN, BRUCE J.; PALEOMAGNETISM, BIOSTRATIGRAPHY, AND TECTONICS OF MIOCENE SEDIMENTS OF THE MOHAVE DESERT, SOUTHERN CALIFORNIA (EAR-8206529); 24 MONTHS \$60,266

UNIVERSITY OF MIAMI-SCHOOL OF MARINE & ATMOSPHERIC SCIENCES

MILLERO, FRANK J.; HIGH PRESSURE AND TEMPERATURE PVT PROPERTIES OF GEOTHERMAL BRINES (EAR-7904237 A01); 12 MONTHS \$61,200

UNIVERSITY OF SOUTH FLORIDA

GARRELS, ROBERT M.; BEHAVIOR OF MINERAL SOLID SOLUTIONS IN LOW TEMPERATURE AQUEOUS SYSTEMS (EAR-8107736 A01); \$2,948

GEORGIA

GEORGIA STATE UNIVERSITY

LA TOUR, TIMOTHY E.; STRUCTURAL AND GEOCHRONOLOGICAL STUDIES OF THE GRENVILLE FRONT (EAR-8208596); 24 MONTHS \$63,184

UNIVERSITY OF GEORGIA

RICH, MARK; FORAMINIFERAL BIOSTRATIGRAPHIC FRAMEWORK OF POST-FORT PAYNE MISSISSIPPIAN ROCKS IN NORTHWESTERN GEORGIA (EAR-8114733); 12 MONTHS \$26,343

FREY, ROBERT W.; PALEOENVIRONMENTAL STUDIES OF UPPER CRETACEOUS ROCKS IN GEORGIA AND ALABAMA (EAR-8118394); 12 MONTHS \$50,400

STORMER, JOHN C. AND WHITNEY, JAMES A.; A STUDY OF THE ORIGIN AND DEVELOPMENT OF SILICIC MAGMAS OF THE CENTRAL SAN JUAN REGION (EAR-8204568); 12 MONTHS \$34,700

DALLMEYER, R. D.; COLLABORATIVE INVESTIGATION OF THE ALTO ALLOCTHON: ITS ORIGIN, TECTONOTHERMAL HISTORY, AND SIGNIFICANCE IN THE EVOLUTION OF CRYSTALLINE THRUST (EAR-8207119); 12 MONTHS \$23,339

DALLMEYER, R. D.; COLLABORATIVE STRUCTURAL AND GEOCHRONOLOGIC INVESTIGATION OF ALLEGHENIAN DEFORMATIONAL EVENTS IN THE APPALACHIAN FORELAND (EAR-8208610); 12 MONTHS \$32,883

HAWAII

UNIVERSITY OF HAWAII-MANOA

MING, LI-CHUNG; PHASE TRANSFORMATIONS AND ELASTICITY OF MANTLE PHASES AT HIGH PRESSURE AND TEMPERATURE (EAR-8020471 A01); 12 MONTHS \$50,000

SHARMA, SHIV K.; STRUCTURAL STUDIES OF SILICATE GLASSES BY RAMAN SPECTROSCOPY AND TRIMETHYLSILYLATION (TMS)-GAS CHROMATOGRAPHY (EAR-8026091 A01); 12 MONTHS \$51,700

MING, LI-CHUNG, KATAHARA, KEITH W. AND RAI, C. S.; LABORATORY STUDY OF VELOCITY AND ATTENUATION IN ROCKS AND SILICATE MELTS (EAR-8116079); 24 MONTHS \$82,900

MING, LI-CHUNG; SINGLE CRYSTAL ELASTIC MODULI OF HIGH-PRESSURE MANTLE PHASES, USING BRILLOUIN SCATTERING (EAR-8116280); 12 MONTHS \$53,000

GETTRUST, JOSEPH F.; ROSE DATA ARCHIVE (EAR-8117820); 24 MONTHS \$5,000

WALKER, GEORGE P. AND SPARKS, STEPHEN R.; VOLCANOLOGY OF THE TOBA TUFF AND ASH, SUMATRA (EAR-8206655); 12 MONTHS \$59,955
KEATING, BARBARA H.; PALEOMAGNETIC, RADIO-METRIC AGE DATING AND PETROLOGIC STUDIES IN AMERICAN AND WESTERN SAMOA (EAR-8207065*); 18 MONTHS \$15,345

PHILPOTTS, JOHN A.; PARTITIONING OF ELEMENTS BETWEEN MINERALS AND MELTS (EAR-8207274); 12 MONTHS \$52,500

FIRING, ERIC; NORTH PACIFIC EXPERIMENT (NORPAX): ANALYSIS OF LOW-FREQUENCY EQUATORIAL DYNAMICS DURING THE NORPAX TAHITI SHUTTLE EXPERIMENT (OCE-8208944*); 12 MONTHS \$798

ILLINOIS

FIELD MUSEUM OF NATURAL HISTORY

MARSHALL, LARRY G.; GEOCHRONOLOGY OF MAMMAL-BEARING CENOZOIC OF ARGENTINA (EAR-7909515 A03); 12 MONTHS \$44,500

KNOX COLLEGE

MOORE, DUANE M.; FORMATION OF CORRENSITE IN THE PRESENCE OF EXCESS POTASSIUM AND IRON-MAGNESIUM (EAR-8207059); 6 MONTHS \$2,160

NORTHERN ILLINOIS UNIVERSITY

MC GINNIS, LYLE D.; PRECISION GRAVITY STUDY IN THE MISSISSIPPI EMBAYMENT (EAR-8115267); 36 MONTHS \$10,000

PERRY, EUGENE C. AND POWELL, ROSS D.; ENVIRONMENTAL CONDITIONS DURING DEPOSITION OF THE IRON FORMATION-DIAMICTITE SUCCESSION IN THE TRANSVAAL SUPERGROUP, SOUTH AFRICA (EAR-8115860); 12 MONTHS \$25,000

MONTGOMERY, CARLA W.; EARLY PRECAMBRIAN EVOLUTION OF THE SOUTHERN BEARTOOTH MOUNTAINS (EAR-8206274); 12 MONTHS \$24,900

NORTHWESTERN UNIVERSITY

WALTHER, JOHN V.; EXPERIMENTAL DETERMINATION OF SOLUBILITIES AND SOLUTION EQUILIBRIA OF ROCK-FORMING MINERALS (EAR-8024146 A02); 24 MONTHS \$91,569

RUDNICKI, J. W.; MECHANISMS OF RUPTURE PROCESSES IN GEOLOGICAL MATERIALS (EAR-8106811); 24 MONTHS \$30,000

SCHLANGER, SEYMOUR O.; PALEOENVIRONMENTAL ANALYSIS OF STRATA DEPOSITED DURING THE CENOMANIAN-TURONIAN OCEANIC ANOXIC EVENT (EAR-8207387*); 12 MONTHS \$37,264

UNIVERSITY OF CHICAGO

GOLDSMITH, JULIAN R.; THE CRYSTAL CHEMISTRY OF SOME SILICATES AND CARBONATES (EAR-7813675 A04); 12 MONTHS \$84,900

CLAYTON, ROBERT N.; STABLE ISOTOPE GEOCHEMISTRY (EAR-7823680 A03); 12 MONTHS \$160,300

NEWTON, ROBERT C.; EXPERIMENTAL GEOCHEMISTRY OF ROCK-FORMING MINERALS AT HIGH TEMPERATURES AND PRESSURES (EAR-8107110); 12 MONTHS \$120,000

WYLLIE, PETER J.; PETROGENETIC LINKS BETWEEN CARBONATITES AND KIMBERLITES (EAR-8108599 A01); \$58,700

WYLLIE, PETER J.; EXPERIMENTAL STUDIES ON THE ORIGIN OF PLUTONIC IGNEOUS ROCK SERIES (EAR-8108626); 12 MONTHS \$69,600

MOORE, PAUL B.; LONE PAIR ELECTRON SYSTEMS, STRUCTURE SYSTEMATICS, SULFOSALTS IN NATURAL PRODUCTS INORGANIC CHEMISTRY (MINERALOGY) (EAR-8121193); 12 MONTHS \$92,700

RICHTER, FRANK M.; CONVECTION STUDIES RELATED TO MANTLE PROCESSES (EAR-8200003); 12 MONTHS \$52,100

NEWTON, ROBERT C.; PROGRESSIVE CHARNOKITE FORMATION IN SOUTHERN KARNATAKA (EAR-8203628); 6 MONTHS \$8,000

WYLLIE, PETER J.; EXPERIMENTAL PETROLOGY OF SUBDUCTION ZONES (EAR-8206178); 12 MONTHS \$70,000

SMITH, JOSEPH V.; MICROPROBE ANALYSES OF UPPER-MANTLE AND RELATED MINERALS (EAR-8206191); 24 MONTHS \$50,000

UNIVERSITY OF ILLINOIS AT URBANA

GRAF, DONALD L. AND HOWER, JOHN; INTERLAYER WATER LOSS FROM COMMON EXPANDABLE CLAY MINERALS UNDER DIAGENETIC CONDITIONS (EAR-8018666 A01); 12 MONTHS \$23,200

CHEN, WANG-PING; A STUDY OF INTRAPLATE INTERMEDIATE DEPTH (SUB CRUSTAL) EARTHQUAKES (EAR-8120497); 12 MONTHS \$30,000

KIRKPATRICK, R. JAMES; KINETICS OF IGNEOUS PROCESSES (EAR-8207260); 12 MONTHS \$74,500

INDIANA

INDIANA UNIVERSITY, BLOOMINGTON

ORTOLEVA, PETER J. AND MERINO, ENRIQUE; KINETIC THEORY OF METAMORPHIC LAYERING (EAR-8018330 A01); 12 MONTHS \$27,100

RIPLEY, EDWARD M.; TRACE METAL AND STABLE ISOTOPIC STUDIES OF THE MINNAPAX AND DUNKA ROAD CU-NI DEPOSITS, DULUTH COMPLEX, MINNESOTA (EAR-8108536 A01); 12 MONTHS \$20,000

RUHE, ROBERT V.; CLIMATIC IMPACT ON SOIL FORMATION IN THE MIDCONTINENT OF THE UNITED STATES (EAR-8113071); 12 MONTHS \$30,879

INDIANA UNIV.-PURDUE UNIV AT INDIANAPOLIS

HALL, ROBERT D.; ABSOLUTE AGES OF QUATERNARY DEPOSITS IN SOUTHWESTERN MONTANA (EAR-8116605); 12 MONTHS \$25,055

PACHUT, JOSEPH F.; COMPONENTS OF MORPHOLOGIC VARIATION IN FOSSIL BRYOZOANS: PALEOSTABILITY, TAXONOMIC AND EVOLUTIONARY IMPLICATIONS (EAR-8120953*); 24 MONTHS \$24,100

ROSENBERG, GARY D.; STRUCTURAL AND COMPOSITIONAL GROWTH RHYTHMS IN LATE ORDOVICIAN BRACHIOPODS (EARTH SCIENCES) (EAR-8205824); 12 MONTHS \$21,100

PURDUE UNIVERSITY

LIPSCHUTZ, MICHAEL E.; WEATHERING AND CHEMISTRY OF ANT-ARCTIC METEORITES (DPP-8111513*); 12 MONTHS \$14,500

IOWA

IOWA STATE UNIVERSITY OF SCIENCE & TECHNOLOGY

RICHARDSON, CATHERINE K.; THE SOLUBILITY AND TRANSPORT OF MOLYBDENUM IN HYDROTHERMAL SOLUTIONS (EAR-8115852); 24 MONTHS \$63,000

JACOBSON, CARL E.; STRUCTURAL AND METAMORPHIC ANALYSIS OF THE VINCENT-CHOCOLATE MOUNTAIN THRUST, SOUTHERN CALIFORNIA (EAR-8121210); 12 MONTHS \$22,321

WINDOM, KENNETH E.; THE SYSTEM $K_2O-NA_2O-CAO-MGO-AL_2O_3-SIO_2$ AT HIGH PRESSURES WITH SPECIAL EMPHASIS ON FELDSPAR PLUS FORSTERITE REACTIONS (EAR-8206657); 12 MONTHS \$38,400

UNIVERSITY OF IOWA

KLAPPER, GILBERT; BIOSTRATIGRAPHIC, PALEOECOLOGIC, AND PALEOBIOGEOGRAPHIC STUDY OF SILURIAN AND DEVONIAN CONODONTS (EAR-8115462); 24 MONTHS \$70,000

KANSAS

KANSAS STATE UNIVERSITY

CULLERS, ROBERT L.; GEOCHRONOLOGICAL AND GEOCHEMICAL STUDIES OF PROTEROZOIC ROCKS OF THE WET MOUNTAINS REGION, SOUTHERN COLORADO (EAR-8208564); 12 MONTHS \$34,000

UNIVERSITY OF KANSAS MAIN CAMPUS

ROBISON, RICHARD A.; AGNOSTOID BIOSTRATIGRAPHY OF A POTENTIAL CAMBRIAN SERIES (EAR-8024066 A01); 12 MONTHS \$32,900

BICKFORD, MARION E.; GEOCHRONOLOGICAL AND GEOCHEMICAL STUDIES OF PROTEROZOIC VOLCANIC SEQUENCES AND PLUTONIC ROCKS IN CENTRAL COLORADO (EAR-8025257 A01); 12 MONTHS \$45,700

SCHULTZE, HANS-PETE; THE RELATIONSHIP BETWEEN FOSSIL VERTEBRATES AND THE LOWER PERMIAN PALEOENVIRONMENT OF KANSAS (EAR-8111721); 24 MONTHS \$39,293

VAN SCHMUS, WILLIAM R.; GEOCHRONOLOGY AND GEOCHEMISTRY OF EARLY PROTEROZOIC MOBILE BELTS IN NORTH AMERICA (EAR-8118234); 12 MONTHS \$76,842

LOUISIANA

LOUISIANA STATE UNIVERSITY, BATON ROUGE

DOKKA, ROY K.; STRUCTURE OF A THIN-SKINNED EXTENSIONAL COMPLEX, CENTRAL MOJAVE DESERT, CALIFORNIA (EAR-8107524 A01); 12 MONTHS \$31,065

LOWE, DONALD R.; SEDIMENTOLOGY OF 3.4 BYR-OLD ROCKS IN THE PILBARA BLOCK, WESTERN AUSTRALIA (EAR-8110863); 24 MONTHS \$65,758

LOWE, DONALD R.; STRUCTURAL AND STRATIGRAPHIC EVOLUTION OF THE ARCHEAN UPPER ONVERWACHT AND LOWER FIG TREE GROUPS, BARBERTON MOUNTAIN LAND, SOUTH AFRICA (EAR-8206015); 12 MONTHS \$56,100

MAINE

UNIVERSITY OF MAINE, ORONO

GUIDOTTI, CHARLES V.; VOLUMES OF MIXING, CRYSTAL CHEMISTRY AND P-T-X CONTROLS ON THE COMPOSITIONAL RANGES OF SOME IMPORTANT SOLID SOLUTION MINERALS OF PELITIC SCHISTS (EAR-8200580); 12 MONTHS \$37,986

LUX, DANIEL R.; 40AR-39AR GEOCHRONOLOGY OF IGNEOUS AND METAMORPHIC ROCKS IN WESTERN MAINE AND ITS IMPLICATION FOR THE THERMAL HISTORY OF THE REGION (EAR-8206549); 12 MONTHS \$30,000

DECKER, EDWARD R.; HEAT FLOW AND RADIOACTIVITY STUDIES IN MAINE (EAR-8207036); 12 MONTHS \$50,000

MCLEAVE, JAMES D.; SPAWNING AND LARVAL DRIFT OF AMERICAN AND EUROPEAN EELS (*ANGUILLA ROSTRATA* AND *A. ANGUILLA*) RELATIVE TO FRONTS AND CIRCULATION IN THE SOUTHERN SARGASSO SEA (OCE-8208394*); 12 MONTHS \$72,000

BELKNAP, DANIEL F.; AMINO ACID RACEMIZATION AS A TEST OF RADIOCARBON DATES SUPPORTING A 'MID-WISCONSIN HIGH SEA STAND' ON THE ATLANTIC COASTAL PLAIN (EAR-8216279); 12 MONTHS \$26,400

MARYLAND

JOHNS HOPKINS UNIVERSITY

MARSH, BRUCE D.; DYNAMIC IGNEOUS PETROLOGY (EAR-8005109 A02); \$2,450

FISHER, GEORGE W. AND VEBLEN, DAVID R.; DYNAMICS OF REGIONAL METAMORPHISM IN EASTERN VERMONT (EAR-8009242 A02); 12 MONTHS \$55,800

EUGSTER, HANS P.; GREAT SALT LAKE, UTAH: GEOCHEMISTRY & SEDIMENTOLOGY (EAR-8111439); \$91,069

BRUSH, GRACE S.; RECONSTRUCTION OF LATE GLACIAL AND HOLOCENE FORESTS IN MIDDLE ATLANTIC UNITED STATES (EAR-8115727); 12 MONTHS \$25,006

VEBLEN, DAVID R; MICROSTRUCTURES AND REACTIONS IN ROCK-FORMING SILICATES (EAR-8115790 A01; 12 MONTHS \$52,500

OLSON, PETER; A STUDY OF SOME THERMAL AND COMPOSITIONAL CONVECTIVE PROCESSES IN THE EARTH'S MANTLE AND CORE (EAR-8115828; 24 MONTHS \$75,000

ELLIOTT, DAVID W. AND GILOTTI, JANE; DOCTORAL DISSERTATION IN EARTH SCIENCES (EAR-8119372; 24 MONTHS \$5,000

MARSH, BRUCE D; MODAL ANALYSIS OF VOLCANIC ROCKS (EAR-8119781; 12 MONTHS \$7,000

EUGSTER, HANS P; THE SOLUBILITIES OF CASSITERITE (SnO₂) AND WOLFRAMITE ((Fe,Mn)WO₄) IN HYDROTHERMAL FLUIDS, WITH APPLICATIONS TO THE SN-W BELT OF SE CHINA (EAR-8206177; 12 MONTHS \$38,700

STANLEY, STEVEN; PATTERNS OF EXTINCTION IN NEOGENE BIVALVIA (EAR-8207275; 12 MONTHS \$29,300

ELLIOTT, DAVID W; THRUST BELT IN THE SOUTHERN PYRENEES (EAR-8211827; 12 MONTHS \$34,430

MASSACHUSETTS

BOSTON COLLEGE

SKEHAN, JAMES W; CORRELATIONS OVER THE AVALON PLATFORM OF MASSACHUSETTS, RHODE ISLAND, AND CONNECTICUT (EAR-8200047; 12 MONTHS \$30,872

BOSTON UNIVERSITY

GOLUBIC, STJEPKO, AND CAMPBELL, SUSAN E; FOSSIL ENDOLITHIC ALGAE AND FUNGI: DEPTH DISTRIBUTION, PALEOBIOLOGY AND EVOLUTION (EAR-8107686 A02; 12 MONTHS \$20,000

HARVARD UNIVERSITY

BURNHAM, CHARLES W; CRYSTAL CHEMISTRY OF ROCK-FORMING MINERALS (EAR-7920095 A02; 12 MONTHS \$80,300

HOLLAND, HEINRICH D; COLLABORATIVE EFFORT: M.I.T.-BROWN-HARVARD REGIONAL ION MICROPROBE FACILITY (EAR-7921356 A02; 12 MONTHS \$22,900

WOODHOUSE, JOHN H; THEORETICAL SEISMIC CALCULATIONS WITH APPLICATIONS TO THE STUDY OF EARTH STRUCTURE AND THE SEISMIC SOURCE (EAR-8019554 A01; 12 MONTHS \$50,000

DZIEWONSKI, ADAM M; DETERMINATION OF EARTHQUAKE SOURCE PARAMETERS FROM WAVEFORM DATA FOR STUDIES OF GLOBAL AND REGIONAL SEISMICITY (EAR-8026441 A01; 12 MONTHS \$80,000

WOODHOUSE, JOHN H; AN INVESTIGATION OF TSUNAMI GENERATION AND PROPAGATION ON A SPHERICAL EARTH (EAR-8108934 A01; 12 MONTHS \$41,300

O'CONNELL, RICHARD J; STUDIES OF PLATE MOTION, MANTLE CONVECTION AND DIFFERENTIATION (EAR-8109164 A01; 12 MONTHS \$49,300

DYMEK, ROBERT F; PETROLOGICAL AND GEOCHEMICAL STUDIES OF ARCHAEOAN SUPRACRUSTAL ROCKS FROM WEST GREENLAND (EAR-8109166; 12 MONTHS \$20,100

THOMPSON, JAMES B; PHASE RELATIONS AND REACTION-SPACE IN METAMORPHIC ROCKS (EAR-8115686; 12 MONTHS \$61,400

SIEVER, RAYMOND; HIGH PRECISION THERMAL IONIZATION MASS SPECTROMETER (EAR-8115921; 12 MONTHS \$148,100

DZIEWONSKI, ADAM M; SUPPORT OF REGIONAL CENTER FOR THE DATA FROM THE GLOBAL DIGITAL SEISMOGRAPH NETWORK (EAR-8120885; 12 MONTHS \$10,000

DZIEWONSKI, ADAM M; ELASTIC AND ANELASTIC STRUCTURE OF THE EARTH'S INTERIOR FROM FREE OSCILLATIONS AND SURFACE WAVE DATA (EAR-8120944; 12 MONTHS \$85,000

RICE, JAMES R; FUNDAMENTAL STUDIES ON FAULT MECHANICS AND EARTHQUAKE PRECURSORY PROCESSES (EAR-8203992; 10 MONTHS \$52,000

DYMEK, ROBERT F; PETROLOGICAL AND GEOCHEMICAL STUDIES ON THE ST. URBAIN ANORTHOSITE MASSIF, QUEBEC, CANADA (EAR-8206741; 12 MONTHS \$45,000

JACOBSEN, S B; NEODYMIUM AND STRONTIUM ISOTOPIC EVOLUTION OF THE OCEANS (EAR-8206954; 12 MONTHS \$69,582

JACOBSEN, S B; Nd- AND Sr-ISOTOPIC STUDIES OF ARCHAEOAN METASEDIMENTARY AND METAGNEOUS ROCKS FROM WEST GREENLAND (EAR-8207219; 12 MONTHS \$58,000

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

HART, STANLEY R; GEOCHEMICAL EVOLUTION OF THE MANTLE (EAR-7803342 A04; 12 MONTHS \$87,340

FREY, FREDERICK A; TRACE ELEMENT DISTRIBUTION IN IGNEOUS GEOLOGIC SYSTEM (EAR-7823423 A03; 12 MONTHS \$82,920

SHAPIRO, IRWIN I, AND COUNSELMAN, CHARLES C; GEOPHYSICAL APPLICATIONS OF ATOMIC CLOCK RADIO INTERFEROMETRY (EAR-7920253 A02; 12 MONTHS \$159,000

HART, STANLEY R, AND SHIMIZU, NOBUMICHI; GEOCHEMICAL RESEARCH USING THE ION MICROPROBE (EAR-7922049 A02; 12 MONTHS \$88,400

BURNS, ROGER G; MOSSBAUER AND ELECTRONIC SPECTRA OF MIXED VALENCE IRON-BEARING MINERALS (EAR-8016163 A01; 12 MONTHS \$69,000

AKI, KEIITI; STUDY OF THE MECHANISM OF TSUNAMIGENIC EARTHQUAKES USING TIDE-GAUGE RECORDS (EAR-8018351 A01; 12 MONTHS \$30,400

HART, STANLEY R; GEOCHEMISTRY AND PETROLOGY OF INDONESIAN ARC MAGMAS (EAR-8024041 A01; 12 MONTHS \$42,200

SCLATER, JOHN G; HEAT FLOW AND TECTONICS OF THE WESTERN MEDITERRANEAN AND SOUTHERN EUROPE (OCE-8024387 A01; 12 MONTHS \$25,000

BRACE, WILLIAM F; LABORATORY MEASUREMENT OF FRACTURE ENERGY UNDER CRUSTAL CONDITIONS (EAR-8025369 A01; 12 MONTHS \$67,300

SIMMONS, GENE; THE FIRST THOUSAND FEET OF NEW ENGLAND CRUST (EAR-8025873 A01; 12 MONTHS \$54,900

HART, STANLEY R; GEOCHEMICAL STUDIES OF LOWER CRUSTAL XENOLITHS FROM KILBOURNE HOLE, NEW MEXICO (EAR-8108570 A02; 12 MONTHS \$36,455

SPEAR, FRANK S; DOCTORAL DISSERTATION RESEARCH IN METAMORPHIC EVOLUTION OF THE AEFJORD-SKJOMEN AREA, NORWAY (EAR-8108607; 12 MONTHS \$7,200

SPEAR, FRANK S; PETROLOGIC INVESTIGATION OF THE AMMONOOSUC AND POST POND VOLCANICS, NEW HAMPSHIRE: A KEY TO THE REGIONAL TECTONICS OF WEST-CENTRAL NEW ENGLAND (EAR-8108617 A01; 12 MONTHS \$60,000

BURCHFIEL, BURRELL C; TECTONIC STUDIES IN THE OROGENIC EVOLUTION OF THE CORDILLERAN OROGEN, SOUTHWESTERN UNITED STATES (EAR-8108619; 12 MONTHS \$63,320

AKI, KEIITI; GLOBAL TECTONIC SYNTHESIS FROM THE SPECTRAL ANALYSIS OF SEISMIC WAVES (EAR-8115538; 12 MONTHS \$70,700

FREY, FREDERICK A; GEOCHEMICAL AND PETROLOGIC STUDIES OF RECENT VOLCANIC ROCKS ASSOCIATED WITH PLATE CONVERGENCE IN CENTRAL-SOUTH CHILE (33-420S) (EAR-8115850; 12 MONTHS \$79,100

SCLATER, JOHN G; A DETAILED INVESTIGATION OF EXTENSIONAL MODELS FOR THE CREATION OF THE PANNONIAN BASIN (HUNGARY) (EAR-8115863; 12 MONTHS \$30,630

SOLOMON, SEAN C; STRUCTURE AND DYNAMICS OF SPREADING CENTERS: TELESEISMIC AND OCEAN-BOTTOM STUDIES (EAR-8115900; 12 MONTHS \$82,000

MOLNAR, PETER; A SEISMOLOGICAL STUDY OF AN INCIPIENT ARC CONTINENTAL COLLISION IN THE WEST BANDA ARC (EAR-8115908; 12 MONTHS \$108,900

SOUTHARD, JOHN B; EXPERIMENTAL STUDIES OF GRAVEL DEPOSITION BY HIGH-CONCENTRATION FLOWS (EAR-8117051; 12 MONTHS \$62,400

MALKUS, WILLEM V; FLUID MOTION IN THE EARTH'S CORE AND MANTLE (EAR-8119504; 24 MONTHS \$80,000

MOLNAR, PETER; GEOPHYSICAL STUDIES OF THE STRUCTURE AND TECTONICS OF ACTIVE OROGENIC BELTS (EAR-8121184; 12 MONTHS \$55,000

GROVE, TIMOTHY L; PHASE EQUILIBRIA AND KINETIC INVESTIGATIONS OF EXTRUSIVE IGNEOUS ROCK (EAR-8200783; 12 MONTHS \$70,000

HART, STANLEY R, AND SHIMIZU, NOBUMICHI; SUPPORT OF M.I.T.-BROWN-HARVARD REGIONAL ION MICROPROBE FACILITY, PART I: DEVELOPMENT AND TECHNOLOGICAL ASPECTS (EAR-8201059; 12 MONTHS \$150,000

BURCHFIEL, BURRELL C; LOWER CRUSTAL RESPONSE TO COLLISIONAL TECTONICS, NORTH NORWAY (EAR-8206300; 12 MONTHS \$45,255

LEWIS, JOHN S; PARTIAL SUPPORT FOR A GORDON CONFERENCE ON EARLY BIOGEOCHEMICAL ENVIRONMENTS (EAR-8208696; 6 MONTHS \$3,000

UNIVERSITY OF LOWELL

EBY, G NELSON; ACQUISITION OF RESEARCH MICROSCOPE AND ACCESSORIES FOR RESEARCH IN GEOLOGY (PRM-8112191; 12 MONTHS \$24,700

UNIVERSITY OF MASSACHUSETTS, AMHERST

MORSE, STEARNS A; CHEMISTRY OF THE KIGLAPAIT INTRUSION, LABRADOR, AND APPLICATION TO ANORTHOSITES (EAR-8109174; 12 MONTHS \$19,900

ROBINSON, PETER; GEOCHEMISTRY AND PETROLOGY OF METAMORPHOSSED VOLCANIC AND PLUTONIC ROCKS OF THE BRONSON HILL ANTICLINORIUM AND MERRIMACK SYNCLINORIUM, CENTRAL MASSACHUSETTS (EAR-8116197; 12 MONTHS \$35,100

MORSE, STEARNS A; BASAL LOWER ZONE OF THE KIGLAPAIT INTRUSION (EAR-8208071; 12 MONTHS \$18,600

WOODS HOLE OCEANOGRAPHIC INSTITUTION

KARSON, JEFFREY A; GEOLOGICAL, PETROLOGICAL AND GEOCHEMICAL STUDY OF OPHIOLITIC ROCKS OF THE BAY OF ISLANDS REGION OF WESTERN NEWFOUNDLAND (EAR-8026445 A01; 12 MONTHS \$58,472

VERONIS, GEORGE; SUMMER WORKSHOPS IN GEOPHYSICAL FLUID DYNAMICS; WOODS HOLE, MASSACHUSETTS (MATHEMATICAL SCIENCES) (OES-8200450; 12 MONTHS \$10,000

HARBISON, G R; THE BIOLOGY OF GELATINOUS ZOOPLANKTON: STUDIES ON OCEANIC TUNICATES, CTENOPHORES AND THEIR PARASITES AND PREDATORS (OCE-8209341; 12 MONTHS \$65,123

MICHIGAN

MICHIGAN TECHNOLOGICAL UNIVERSITY

MCDOWELL, S DOUGLAS; METAMORPHISM OF FINE GRAINED SEDIMENTS IN THE SALTON SEA GEOTHERMAL SYSTEM, CALIFORNIA (EAR-8120821; 12 MONTHS \$55,000

DIEHL, JIMMY F; PALEOMAGNETIC INVESTIGATION OF MID-TERTIARY ROCKS FROM THE MOGOLLON-DATIL VOLCANIC FIELD, SOUTHWESTERN NEW MEXICO (EAR-8121237; 12 MONTHS \$31,300

ROSE, WILLIAM I; BIMODAL QUATERNARY VOLCANISM ALONG GUATEMALA'S CONVERGENT PLATE BOUNDARY (EAR-8205600; 12 MONTHS \$41,200

ROSE, WILLIAM I; COLLABORATIVE RESEARCH: VOLCANOLOGY OF THE TOBA TUFF AND ASH, SUMATRA (EAR-8206685; 12 MONTHS \$28,647

UNIVERSITY OF MICHIGAN-ANN ARBOR

- KELLY, WILLIAM C; FLUID INCLUSION INVESTIGATIONS (EAR-8025263 A01); 12 MONTHS \$90,300
- VAN DER VOO, ROB; PALEOMAGNETISM OF EARLY PALEOZOIC ROCKS FROM NORTH AMERICA AND WESTERN EUROPE (EAR-8103031 A01); 12 MONTHS \$73,700
- PEACOR, DONALD R; MICROCHEMICAL AND ULTRASTRUCTURAL ANALYSIS OF NON-EQUILIBRIUM GEOLOGICAL PROCESSES (EAR-8107529 A01); 12 MONTHS \$78,400
- LOHMANN, KYGER C; DIAGENESIS OF METASTABLE MARINE CEMENTS: EVALUATION OF MECHANISMS AND APPLICATIONS TO PALEO-OCEAN CHEMISTRY (EAR-8115840); 12 MONTHS \$59,800

MINNESOTA

UNIVERSITY OF MINNESOTA

- MURTHY, V RAMA; ISOTOPIC AND GEOCHEMICAL STUDIES OF MANTLE-RELATED ROCKS AND MINERALS (EAR-7919590 A02); 12 MONTHS \$83,400
- BANERJEE, SUBIR K; PALEOMAGNETISM, PALEOCLIMATE AND PALEOENVIRONMENT (EAR-8019466 A01); 12 MONTHS \$47,500
- SAWKINS, FREDERICK J; ORE GENESIS STUDIES OF THE LIK MASSIVE SULFIDE DEPOSITS, AND RELATED AREAS OF MINERALIZATION, DE LONG MOUNTAINS N.W. ALASKA (EAR-8114406); 24 MONTHS \$53,000
- HOKE, ROGER L; STUDIES OF GLACIER SLIDING AND ICE RHEOLOGY (EAR-8114712); 24 MONTHS \$68,170
- ALEXANDER, E C, SEYFRIED, WILLIAM E, SAWKINS, FREDERICK J, AND NIER, A O; APPLICATION OF MINIATURIZED, HIGH PERFORMANCE, DOUBLE FOCUSING MASS SPECTROMETERS TO TERRESTRIAL RARE GAS AND STABLE ISOTOPE GEOCHEMISTRY (EAR-8115429); 12 MONTHS \$166,500
- STOUT, JAMES H; PHASE RELATIONS AT HIGH PRESSURE AND TEMPERATURE BY SIMULTANEOUS DIAMOND ANVIL LASER HEATING AND ENERGY DISPERSIVE DIFFRACTION (EAR-8121185); 12 MONTHS \$25,900
- HOKE, ROGER L, AND JOHNSON, GERALD W; GLACIOLOGICAL STUDIES ON BARNES ICE CAP, CANADA (EAR-8122112); 12 MONTHS \$30,000
- HUDLESTON, PETER J, AND SOUTHWICK, DAVID L; STRUCTURAL ANALYSIS OF AN ARCHEAN GREENSTONE/GRANITE TERRANE IN NORTHERN MINNESOTA (EAR-8206843); 12 MONTHS \$37,722
- BANERJEE, SUBIR K; THE GEOMAGNETIC SECULAR VARIATION RECORD OF HAWAIIAN LAKE SEDIMENTS (EAR-8206844); 12 MONTHS \$60,000
- SHAW, GEORGE H; ELASTIC PROPERTIES OF POLYMORPHS (EAR-8207698); 12 MONTHS \$28,400

UNIVERSITY OF MINNESOTA AT DULUTH

- HOLST, TIMOTHY B; THE PRECAMBRIAN PENOKAN OROGENY IN MINNESOTA (EAR-8120951); 24 MONTHS \$42,477
- GRANT, JAMES A; GEOTHERMOMETRY AND GEOBAROMETRY OF THE SYENITES AND HORNFEISES ASSOCIATED WITH THE LARAMIE AN-ORTHOSITE (EAR-8207429); 12 MONTHS \$14,500

MISSISSIPPI

OFFICE OF NAVAL RESEARCH-OCEAN SCIENCE AND TECHNOLOGY DETACHMENT

- KAULUM, KEITH W; SUPPORT OF THE SECRETARIAT OF THE INTERNATIONAL ASSOCIATION FOR THE PHYSICAL SCIENCES OF THE OCEAN (IAPSO) (OCE-8011218 A02); 12 MONTHS \$9,000

MISSOURI

SOUTHWEST MISSOURI STATE UNIVERSITY

- MILLER, JAMES F; CONODONT BIOSTRATIGRAPHY OF THE CAMBRIAN-ORDOVICIAN BOUNDARY (EAR-8108621 A01); 12 MONTHS \$21,300

ST LOUIS UNIVERSITY

- MITCHELL, BRIAN J; WATER PRESSURE FLUCTUATIONS AND THEIR RELATIONSHIP TO SEISMICITY AND TECTONICS IN TAIWAN (EAR-8110868); 12 MONTHS \$51,876

UNIVERSITY OF MISSOURI, COLUMBIA

- KELLER, WALTER D; MORPHOLOGIES, AL/SI RATIOS, AND TRACE ELEMENT COMPOSITIONS OF KOALIN AND RELATED BAUXITES AND HIGH-ALUMINA MINERALS (EAR-8119592); 24 MONTHS \$39,315

UNIVERSITY OF MISSOURI, ROLLA

- MANUEL, OLIVER K; NOBLE GASES IN THE EARTH AND ITS ATMOSPHERE (EAR-8207588); 12 MONTHS \$10,000

WASHINGTON UNIVERSITY

- BATIZA, RODEY; FIELD AND GEOCHEMICAL STUDY OF GRANITOID ROCKS FROM A METAMORPHIC CORE COMPLEX IN EASTERN EGYPT (EAR-8009023 A02); 6 MONTHS \$8,400

- PASTERIS, JILL D; FLUID INCLUSIONS AND SULFIDE MINERALOGY IN SEVERAL SUITES OF MANTLE ROCKS - THEIR COMPOSITIONS AND PETROLOGIC SIGNIFICANCE (EAR-8025255 A01); 12 MONTHS \$32,100

- DAVIES, GEOFFREY F; DYNAMICS AND EVOLUTION OF THE EARTH'S MANTLE (EAR-8108587 A01); 12 MONTHS \$40,000

- CROZAZ, GHISLAINE, WALKER, ROBERT M, AND PODOSEK, FRANK A; MULTIDISCIPLINARY STUDY OF METEORITES (EAR-8116361); 12 MONTHS \$95,600

- PODOSEK, FRANK A, AND BERNATOWICZ, THOMAS J; NOBLE GAS GEOCHEMISTRY (EAR-8120616); 12 MONTHS \$52,300

- DAVIES, GEOFFREY F; EVOLUTION OF CONTINENTAL CRUST (EAR-8121199); 12 MONTHS \$25,000

MONTANA

MONTANA COLLEGE OF MINERAL SCIENCE & TECH

- VOLBORTH, ALEXIS; ELECTRON MICROSCOPIC AND MINERAGRAPHIC QUANTITATIVE STUDY OF TWO DENSE GRAPHITE-SULFIDE-OXIDE-SILICATE XENOLITHS WITH (CR,PT,PD,NI)-METAL ALLOY PARTICLES IN MASSIVE GRAPHITE (EAR-8213044); 12 MONTHS \$19,300

NEVADA

UNIVERSITY OF NEVADA, RENO

- NOBLE, DONALD C; CENOZOIC VOLCANIC, TECTONIC AND METALLOGENIC EVOLUTION OF THE ANDES OF PERU (EAR-8205787); 12 MONTHS \$18,100

- SCHWEICKERT, RICHARD A; TECTONIC SIGNIFICANCE OF PALEOZOIC BASEMENT TERRANES IN THE WEST-CENTRAL SIERRA NEVADA, CALIFORNIA: CONTINUATION AND TRANSECT ACROSS THE CENTRAL SIERRA (EAR-8211624); 12 MONTHS \$38,451

NEW HAMPSHIRE

DARTMOUTH COLLEGE

- STOIBER, RICHARD E; MASAYA VOLCANO, NICARAGUA, VOLCANOLOGY AND THE EFFECTS OF THE HIGH LEVEL OF GAS EMISSION (EAR-8025719 A01); \$2,300

- STOIBER, RICHARD E; MASAYA VOLCANO, NICARAGUA, VOLCANOLOGY AND THE EFFECTS OF THE HIGH LEVEL OF GAS EMISSION (EAR-8025719 A02*); 12 MONTHS \$15,400

- REYNOLDS, ROBERT C; THE SMECTITE-ILLITE REACTION IN CONTACT METAMORPHISM AND POSSIBLE CORRELATIONS WITH BURIAL DIAGENESIS (GEOLOGY) (EAR-8206188); 12 MONTHS \$36,739

UNIVERSITY OF NEW HAMPSHIRE, DURHAM

- GAUDETTE, HENRI E; A RB-SR AND U-PB GEOCHRONOLOGICAL STUDY OF PRECAMBRIAN ROCKS IN EASTERN NEW ENGLAND AND MARITIME CANADA (II) (EAR-8121423); 12 MONTHS \$67,800

- GAUDETTE, HENRI E; A RB-SR AND U-PB GEOCHRONOLOGICAL STUDY OF PRECAMBRIAN ROCKS IN EASTERN NEW ENGLAND AND MARITIME CANADA (II) (EAR-8121423 A01); \$7,200

NEW JERSEY

PRINCETON UNIVERSITY

- PHINNEY, ROBERT A; CONTINUED STUDIES OF DEEP CRUSTAL REFLECTION DATA (EAR-8024108 A01); 12 MONTHS \$92,100

- CRERAR, DAVID A; THE GEOCHEMISTRY OF MANGANIFEROUS OPHIOLITES IN THE FRANCISCAN ASSEMBLAGE: IMPLICATIONS FOR HYDROTHERMAL ACTIVITY AT OCEANIC SPREADING CENTERS (EAR-8025487 A01); 12 MONTHS \$26,400

- MORGAN, W JASON; HOTSPOTS, LITHOSPHERIC THINNING, AND ELEVATION CHANGES (EAR-8025875 A01); 12 MONTHS \$39,900

- FISCHER, ALFRED G; BEDDING CYCLES IN SHALY AND CALCAREOUS SEDIMENTS AS POSSIBLE RECORDS OF ORBITAL CONTROL (EAR-8107648 A01); 12 MONTHS \$42,300

- HARGRAVES, ROBERT B; A MAGNETIC & TRANSMISSION ELECTRON MICROSCOPY INVESTIGATION OF SYNTHETIC & NATURAL TITANOMAGNETITES & TITANOMAGHEMITES (EAR-8115580*); 12 MONTHS \$25,385

- SPERA, FRANK J; NATURE AND ORIGIN OF COMPOSITIONAL ZONATION AND COMPOSITIONAL GAPS IN PERALKALINE IGNI MBRITES FROM GRAN CANARIA, CANARY ISLANDS (EAR-8115728); 24 MONTHS \$72,900

- BONINI, WILLIAM E; MAGNETIC STUDY OF THE CARIBBEAN-SOUTH AMERICAN PLATE BOUNDARY AND COMPILATION OF AEROMAGNETIC MAPS FOR NORTHERN VENEZUELA (EAR-8115833); 12 MONTHS \$16,100

- DAHLEN, F A, AND WAHR, JOHN M; AN INVESTIGATION OF SOME ATMOSPHERIC AND OCEANIC EFFECTS ON THE EARTH'S VARIABLE ROTATION (EAR-8115903); 12 MONTHS \$40,000

- SUPPE, JOHN E; SEDIMENTATION ADJACENT TO ACTIVE ARC-CONTINENT COLLISION (EAR-8121196); 24 MONTHS \$110,519

- DAHLEN, F A; STUDIES OF THE EARTH'S FREE OSCILLATIONS AND LARGE-SCALE LATERAL HETEROGENEITY (EAR-8121197); 12 MONTHS \$75,100

- SPERA, FRANK J; RHEOLOGY OF SILICATE MELTS AND MAGMATIC SUSPENSIONS: CORRELATIONS BETWEEN TEMPERATURE, COMPOSITION, OXIDATION STATE AND STRAIN RATE (EAR-8121200); 12 MONTHS \$39,700

- CRERAR, DAVID A; PHYSICAL CHEMICAL STUDIES OF HYDROTHERMAL SOLUTIONS (EAR-8206147); 12 MONTHS \$60,000

RUTGERS UNIVERSITY

- CARR, MICHAEL J; A MODEL OF MAGMATIC EVOLUTION FOR THE CENTRAL AMERICAN VOLCANIC FRONT (EAR-8007424 A01); 5 MONTHS \$12,000

- MCGHEE, GEORGE R; PALEOECOLOGY AND EVOLUTION OF LATE DEVONIAN BENTHIC MARINE COMMUNITIES (EAR-8115518); 24 MONTHS \$47,048

NEW MEXICO

NEW MEXICO INSTITUTE OF MINING AND TECHNOLOGY

- CONDIE, KENT C; GEOCHEMICAL STUDY OF THE ARCHEAN LOW-GRADE TO HIGH-GRADE TRANSITION ZONE IN SOUTHERN INDIA (EAR-8201227); 12 MONTHS \$31,415

UNIVERSITY OF NEW MEXICO

- ANDERSON, ROGER Y; EFFECTS OF MT. ST. HELENS TEPHRA ON LAKES IN WASHINGTON STATE (EAR-8113072); 24 MONTHS \$64,805
GRAMBLING, JEFFREY A; EFFECTS OF MINOR ELEMENTS ON METAMORPHIC PHASE RELATIONS (EAR-8115530); 12 MONTHS \$28,700
KEIL, KLAUS; PARTIAL FUNDING OF ELECTRON MICROPROBE X-RAY ANALYZER (EAR-8201211); 12 MONTHS \$180,000

NEW YORK

BROOKLYN COLLEGE

- BHATTACHARJI, SOMDEV; SFC AWARD (INDIAN AND U.S. CURRENCY) FOR A BINATIONAL WORKSHOP ON THE EVOLUTION AND ECONOMIC POTENTIAL OF THE CUDDAPAH BASIN, SOUTH INDIA (INT-8116808*); 12 MONTHS \$5,660

COLLEGE AT BROOKPORT

- MUMPTON, FREDERICK A; ZEO-AGRICULTURE '82: A CONFERENCE ON THE USE OF NATURAL ZEOLITE MINERALS IN AGRICULTURE AND AQUACULTURE (EAR-8206950); 12 MONTHS \$5,000

COLUMBIA UNIVERSITY

- DALZIEL, IAN W; COOPERATIVE GEOLOGIC STUDIES IN THE SOUTHERN ANDES (INT-7920213 A01*); 24 MONTHS \$10,000

COLUMBIA UNIVERSITY-LAMONT-DOHERTY GEOLOGICAL OBSERVATORY

- KING, KENNETH; FOSSIL PROTEINS: CHEMICAL REACTIONS & GEOCHRONOLOGIC APPLICATIONS (OCE-7808647 A03*); 6 MONTHS \$17,500
ZINDLER, ALAN; GEOCHEMISTRY OF LHERZOLITE NODULES: IMPLICATIONS FOR MELT EVOLUTION IN THE MANTLE (EAR-8011461 A01); 12 MONTHS \$41,000

- SCHOLZ, CHRISTOPH H. AND JOHNSON, TRACY L; EXPERIMENTAL STUDY OF THE EARTHQUAKE NUCLEATION PROCESS, THE STATIC TO DYNAMIC FRICTION TRANSITION, AND DYNAMIC FRICTION (EAR-8018669 A01); 12 MONTHS \$70,500

- KENT, DENNIS V; PALEOMAGNETIC STUDIES OF PALEOZOIC ROCKS IN WEST AFRICA (EAR-8025504 A01); 12 MONTHS \$60,000

- KENT, DENNIS V. AND OPDYKE, NEIL D; PALEOMAGNETIC INVESTIGATION OF THE YANGTZE PARAPLATFORM (EAR-8025867 A01); 12 MONTHS \$60,000

- LAWRENCE, JAMES R; PALEOGEOGRAPHY AND PALEOCLIMATES FROM STABLE ISOTOPIC STUDIES OF ANCIENT KAOLINITES (EAR-8108553 A01); 12 MONTHS \$32,452

- AGGARWAL, YASH P; SEISMOTECTONIC STUDIES OF SOUTHERN CARIBBEAN-NORTHERN VENEZUELA REGION (EAR-8108590); 12 MONTHS \$42,800

- WATTS, ANTHONY B; CRUSTAL FLEXURE AND THE DRIVING MECHANISM OF SEDIMENTARY BASIN FORMATION (EAR-8109473); 12 MONTHS \$36,270

- DALZIEL, IAN W; PENROSE CONFERENCE: THE ANTARCTIC PLATE - A GLOBAL PERSPECTIVE (DPP-8115101*); 6 MONTHS \$4,000

- BILHAM, ROGER G; A HYDROSTATIC PRESSURE LEVEL FOR PRECISION VERTICAL GEODESY (EAR-8116369); 12 MONTHS \$15,000

- DAS, SHAMITA, RICHARDS, PAUL G. AND SCHOLZ, CHRISTOPH H; FUNDAMENTAL STUDIES OF SPONTANEOUS EARTHQUAKE FAULTING MODELS (EAR-8120318); 12 MONTHS \$63,100

- SYKES, LYNN R; WYNNSS FILM-CHIP FACILITY (EAR-8121006); 24 MONTHS \$32,900

- SEEBER, LEONARDO, AND ARMBRUSTER, JOHN; SEISMICITY PATTERNS IN THE SOUTHEASTERN U.S. BEFORE AND AFTER THE 1886 EARTHQUAKE (EAR-8205860); 12 MONTHS \$50,000

- BILHAM, ROGER G; FIBER STRAINMETERS FOR EARTHQUAKE HAZARD REDUCTION IN THE PEOPLE'S REPUBLIC OF CHINA (EAR-8206050); 12 MONTHS \$30,000

- JONES, LUCILE M; DO PORESHOCKS RESULT FROM RUPTURE PROPAGATION AROUND LARGE DISCONTINUITIES IN FAULTS (EAR-8206387); 12 MONTHS \$35,000

- ZINDLER, ALAN; AN ISOTOPIC INVESTIGATION OF THE RONDA ULTRAMAFIC COMPLEX: IMPLICATIONS FOR THE SCALE OF EARTH MANTLE HETEROGENEITY (EAR-8206477); 12 MONTHS \$10,200

- KUO, JOHN T; THE VARIATION OF GRAVITY AND THE OCCURRENCE OF EARTHQUAKE IN THE BEIJING-TIANJIN-TANGSHAN-ZHANGJIAKOU (BTZZ) REGION (EAR-8208765); 12 MONTHS \$75,000

CORNELL UNIVERSITY

- MCBRIDE, MURRAY B; INTERACTIONS OF METAL-ORGANIC COMPLEXES WITH CLAY MINERAL AND OXIDE SURFACES IN AQUEOUS SOLUTION (EAR-7923290 A02); 12 MONTHS \$20,824

- KOHLSTEDT, DAVID L; KINETIC DEMIXING OF NON-HYDROSTATICALLY STRESSED MULTICOMPONENT OXIDES AND SILICATES (DMR-8100131*); 12 MONTHS \$25,000

- BIRD, JOHN M. AND BASSETT, WILLIAM A; ORIGIN OF TERRESTRIAL OS-IR-RU ALLOYS (EAR-8107706); 24 MONTHS \$115,000

- CISNE, JOHN L; RELATIVE SEA LEVEL CURVES FOR STRATIGRAPHIC CORRELATION: AMERICAN UPPER MIDDLE ORDOVICIAN (EAR-8121052); 12 MONTHS \$21,300

CORNELL UNIVERSITY-CORNELL UNIVERSITY - ENDOWED

- OLIVER, JACK E. KAUFMAN, SIDNEY, AND BROWN, LARRY D; SEISMIC REFLECTION PROFILING OF THE CONTINENTAL BASEMENT (COCORP) (EAR-8018363 A02); 12 MONTHS \$1,000,000

- OLIVER, JACK E. KAUFMAN, SIDNEY, AND BROWN, LARRY D; SEISMIC REFLECTION PROFILING OF THE CONTINENTAL BASEMENT (COCORP) (EAR-8018363 A03*); \$1,700,000

- OLIVER, JACK E. KAUFMAN, SIDNEY, AND BROWN, LARRY D; ADVANCED ANALYSIS OF COCORP DATA WITH SCIENTIFIC AND TECHNOLOGICAL GOALS (EAR-8025361 A01); 12 MONTHS \$80,000

- BIRD, JOHN M; DEFORMATION-INDUCED MICROSTRUCTURES IN FOLDED ROCKS (EAR-8026446 A01); 12 MONTHS \$50,200

- BARAZANGI, MUAWIA, AND ISACKS, BRYAN L; SEISMOTECTONICS OF THE HIMALAYAN AND ZAGROS ARCS: DEPTH OF FAULTING AND SPATIAL EXTENT OF DEFORMATION, AND UPPERMOST MANTLE PROPERTIES BENEATH TIBET AND WESTERN USA (EAR-8107666 A01); 12 MONTHS \$50,000

- KOHLSTEDT, DAVID L; RHEOLOGY OF PARTIALLY MOLTEN MANTLE ROCKS (EAR-8115692); 12 MONTHS \$65,000

- BASSETT, WILLIAM A; INTENSE SYNCHROTRON X-RAY SOURCE, APPLICATIONS TO HIGH PRESSURE-TEMPERATURE EXPERIMENTAL GEOPHYSICS IN THE DIAMOND ANVIL CELL (EAR-8116083); 12 MONTHS \$103,500

- RAJ, RISHI; Q MEASUREMENTS IN OLIVINE (EAR-8116281); 12 MONTHS \$55,000

- ISACKS, BRYAN L; SEISMOTECTONICS OF SUBDUCTION: INTENSIVE STUDIES OF THE NEW HEBRIDES ISLAND ARC INCLUDING NEW ARRAY MEASUREMENTS (EAR-8116285); 12 MONTHS \$115,200

- BLOOM, ARTHUR L; TECTONIC GEOMORPHOLOGY OF THE SIERRA PAMPEANAS, NORTHWESTERN ARGENTINA (EAR-8116603); 24 MONTHS \$80,000

- CISNE, JOHN L; STRATIGRAPHIC DISTRIBUTION AND ANATOMICAL VARIATION IN MARINE INVERTEBRATES ALONG AN ORDOVICIAN DEPTH GRADIENT (EAR-8117987); 12 MONTHS \$21,500

- TURCOTTE, DONALD L; STUDIES OF MANTLE CONVECTION AND RELATED PROBLEMS (EAR-8121053); 12 MONTHS \$31,600

- ISACKS, BRYAN L. AND BARAZANGI, MUAWIA; SEISMICITY AND TECTONICS OF A CORDILLERAN TYPE MOUNTAIN BELT: THE ANDES OF ARGENTINA, CHILE AND BOLIVIA (EAR-8121816); 12 MONTHS \$91,100

- GIBBS, ALLAN K; PETROLOGY OF THE LOWER PROTEROZOIC GREENSTONE BELT OF THE GUIANA SHIELD (EAR-8207422); 12 MONTHS \$52,000

- BASSETT, WILLIAM A; A CONFERENCE: X-RAY STUDIES AT HIGH PRESSURES USING SYNCHROTRON RADIATION (EAR-8207705); 6 MONTHS \$5,000

RENSSELAER POLYTECHNIC INSTITUTE

- WATSON, E. BRUCE; EXPERIMENTAL STUDIES IN THE KINETICS OF MAGMATIC PROCESSES (EAR-8025887 A01); 12 MONTHS \$45,100

STATE UNIVERSITY AT ALBANY

- KIDD, WILLIAM S. AND DAVIS, KARLEEN E; SEDIMENTARY PETROLOGY & MINERAL CHEMISTRY OF THE MEDIAL ORDOVICIAN FLYSCH OF WESTERN NEW ENGLAND: IMPLICATIONS FOR ARC/CONTINENTAL MARGIN COLLISION DURING THE TACONIC OROGENY (EAR-8116921); 12 MONTHS \$20,000

- HARRISON, TIMOTHY M; THERMAL HISTORIES OF CRUSTAL ROCKS FROM THE 40AR/39AR AGE SPECTRUM METHOD (EAR-8121275); 24 MONTHS \$57,700

- MIYASHIRO, AKIHO; MISCIBILITY GAPS OF PLAGIOCLASE UNDER THE AMPHIBOLITE FACIES CONDITION (EAR-8201431); 24 MONTHS \$23,300

- MEANS, WINTHROP D; EXPERIMENTAL STUDY OF DYNAMIC RECRYSTALLIZATION (EAR-8205820); 12 MONTHS \$22,795

STATE UNIVERSITY AT BUFFALO

- HODGE, DENNIS, COZZARELLI, FRANCIS A. AND SHAW, RICHARD P; EFFECT OF NONLINEAR NONISOTHERMAL CREEP ON VERTICAL DEFLECTIONS AND STRESSES IN THE LITHOSPHERE ASSOCIATED WITH MAGMA INTRUSION AND VOLCANIC LOADING (EAR-8016884 A01); 12 MONTHS \$56,100

STATE UNIVERSITY AT STONY BROOK

- WARASILA, ROBERT L; LASER MICROPROBE 39AR - 40AR DATING OF TERRESTRIAL AND LUNAR ROCKS (EAR-7919961 A02); 6 MONTHS \$16,900

- LIEBERMANN, ROBERT C. AND WEIDNER, DONALD J; ELASTICITY OF POLYCRYSTAL AND SINGLE CRYSTAL SPECIMENS SYNTHESIZED AT HIGH PRESSURE (EAR-8018343 A01); 12 MONTHS \$83,600

- LINDSLEY, DONALD H; PHASE EQUILIBRIA AND SOLUTION MODELING OF PYROXENES AND FE-TI OXIDES (EAR-8025260 A01); 12 MONTHS \$60,000

- DODD, ROBERT T; PETROLOGY OF THE ORDINARY CHONDRITIC METEORITES (EAR-8108579); 24 MONTHS \$82,300

- HANSON, GILBERT N; ORIGIN OF GRANITIC ROCKS IN ARCHEAN TERRAINS (EAR-8108586 A01); 12 MONTHS \$46,700

- PREWITT, CHARLES T; SYSTEMATIC RELATIONS AMONG CRYSTALLOGRAPHIC, CHEMICAL AND ELASTIC PROPERTIES (EAR-8108400); 12 MONTHS \$108,400

- WEIDNER, DONALD J; ELASTIC PROPERTIES OF MANTLE MINERALS (EAR-8120954); 12 MONTHS \$74,000

- LINDSLEY, DONALD H; GEOTHERMOMETRY AND GEOBAROMETRY OF THE SYENITES AND HORNFELS ASSOCIATED WITH THE LARAME ANORTHOSITE (EAR-8207423); 12 MONTHS \$22,000

UNIVERSITY OF ROCHESTER

- MITRA, GAUTAM; COLLABORATIVE RESEARCH: GEOLOGIC AND GEOPHYSICAL STUDIES OF ARCHEAN CRUST IN WIND RIVER MOUNTAIN - AN APPROACH TO UNDERSTANDING DEEP SEISMIC REFLECTIONS (EAR-8207395); 12 MONTHS \$18,804

NORTH CAROLINA

APPALACHIAN STATE UNIVERSITY

RAYMOND, LOREN A. ACQUISITION OF RESEARCH MICROSCOPE AND ACCESSORIES FOR GEOLOGIC STUDIES (PRM-8112182*); 12 MONTHS \$25,187

EAST CAROLINA UNIVERSITY

SNYDER, SCOTT W. AND KONTROVITZ, MERVIN; DIFFERENTIAL TRANSPORT OF FORAMINIFERAL TESTS: PRACTICAL APPLICATION OF AN EXPERIMENTAL MODEL (EAR-8115266); 24 MONTHS \$41,137

UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL

ROGERS, JOHN J. PRECAMBRIAN OF SOUTH INDIA (EAR-7905723 A03*); 12 MONTHS \$68,700

BARTLEY, JOHN M. BASEMENT INVOLVEMENT IN DEFORMATION AND EXTENT OF POSTEMPLACEMENT RESTACKING OF CALEDONIAN NAPPE, NORTH NORWAY (EAR-8107525 A01); 12 MONTHS \$28,255

STRELITZ, RICHARD A. SOURCE STUDIES OF EVENTS WITH UNUSUAL SEISMICITY PATTERNS (EAR-8116021); 12 MONTHS \$23,900

FULLAGAR, PAUL D. AND STEIN, HOLLY J. PORPHYRY SYSTEMS IN THE COLORADO MINERAL BELT USING LEAD AND STRONTIUM ISOTOPES AND RARE EARTH ELEMENT ABUNDANCES (EAR-8120925); 17 MONTHS \$35,800

OHIO

CASE WESTERN RESERVE UNIVERSITY

ARONSON, JAMES, AND SAVIN, SAMUEL M. POTASSIUM/ARGON CLAY MINERALOGIC STUDIES IN AN UNUSUAL ARGILLACEOUS GEOSYNCLINE OF THE CIRCUM-PACIFIC MARGIN (EAR-8121379); 12 MONTHS \$50,751

MIAMI UNIVERSITY CENTRAL OFFICE

GRANT, NORMAN K. STRONTIUM AND OXYGEN ISOTOPE VARIATIONS AND RARE-EARTH ELEMENT ABUNDANCES IN MISSISSIPPI VALLEY-TYPE GANGUE MINERALS (EAR-8115690); 24 MONTHS \$18,100

GRANT, NORMAN K. STRONTIUM AND OXYGEN ISOTOPE VARIATIONS AND RARE-EARTH ELEMENT ABUNDANCES IN MISSISSIPPI VALLEY-TYPE GANGUE MINERALS (EAR-8115690 A01); \$740

HUGHES, JOHN M. ACQUISITION OF CAMERA EQUIPMENT FOR CRYSTALLOGRAPHIC RESEARCH (PRM-8117456*); 12 MONTHS \$12,205

GRANT, NORMAN K. STRONTIUM ISOTOPE AND GEOCHEMICAL STUDY OF A DULUTH COMPLEX DRILL CORE (EAR-8206426); 12 MONTHS \$14,500

OBERLIN COLLEGE

EGLOFF, DAVID A. ANATOMICAL AND BEHAVIORAL STUDIES OF FEEDING IN NON-CALANOID COPEPODS ASSOCIATED WITH GULF STREAM WARM CORE RINGS (OCE-8206879*); 12 MONTHS \$10,000

OHIO STATE UNIVERSITY

FOLAND, KENNETH A. INVESTIGATION OF OXYGEN AND ALKALI DIFFUSION IN FELDSPAR (EAR-8020198 A01); 12 MONTHS \$47,600

MERCER, JOHN H. GLACIAL GEOLOGICAL AND FOSSIL BEETLE STUDIES IN SOUTHERN ARGENTINA: A CLIMATIC RECONSTRUCTION OF THE LAST 15,000 YEARS (EAR-8200251*); 12 MONTHS \$46,500

UNIVERSITY OF CINCINNATI

HUFF, WARREN D. CORRELATION OF MIDDLE ORDOVICIAN K-BENTONITES OF EASTERN NORTH AMERICA ON THE BASIS OF MAJOR AND MINOR ELEMENT DISTRIBUTION (EAR-8208480); 12 MONTHS \$41,800

WRIGHT STATE UNIVERSITY

PUSHKAR, PAUL. ACQUISITION OF X-RAY FLUORESCENCE EQUIPMENT (PRM-8112915*); 12 MONTHS \$35,000

GREGOR, C B. EIGHTH SYMPOSIUM ON GEOCHEMICAL CYCLES: CINCINNATI, NOVEMBER 1, 1981 (EAR-8118561); 6 MONTHS \$1,100

OKLAHOMA

UNIVERSITY OF OKLAHOMA NORMAN CAMPUS-BIOLOGICAL STATION

CAMERON, MARVELLEN, AND CAMERON, KENNETH L. COLLABORATIVE RESEARCH: GEOLOGY AND GEOCHEMISTRY OF TERTIARY VOLCANIC ROCKS FROM NORTHWESTERN MEXICO AND ADJACENT WEST TEXAS (EAR-8122046); 24 MONTHS \$38,800

OREGON

OREGON STATE UNIVERSITY

BOUCOT, ARTHUR J. GLOBAL GEOLOGY OF SILURIAN-DEVONIAN ROCKS AND ASSOCIATED INVERTEBRATE FAUNAS, ESPECIALLY BRACHIOPODS (EAR-7919993 A03); 12 MONTHS \$71,681

YEATS, ROBERT S. RELATION OF NEOGENE THRUST FAULTS TO SAN ANDREAS FAULT IN CUYAMCA VALLEY, CALIFORNIA (EAR-8022271 A01); 24 MONTHS \$58,098

FEHLER, MICHAEL C. SPECTRAL STUDIES OF EARTHQUAKES OCCURRING AT MT. ST. HELENS VOLCANO (EAR-8115838); 15 MONTHS \$20,900

LAWRENCE, ROBERT D. AND YEATS, ROBERT S. SFC AWARD (PAKISTANI CURRENCY AND U.S. DOLLARS) FOR STUDY OF THE TECTONICS OF NORTHERN PAKISTAN (GEODYNAMICS OF PAKISTAN PROJECT) (INT-8118403*); 36 MONTHS \$15,416

JOHNSON, J G. A STANDARD BIOSTRATIGRAPHIC SEQUENCE FOR THE DENONIAN IN WESTERN NORTH AMERICA (EARTH SCIENCES) (EAR-8120952); 12 MONTHS \$47,000

LEVI, SHAUL. PARTIAL FUNDING OF A SUPERCONDUCTING MAGNETOMETER SYSTEM (EAR-8121385*); 12 MONTHS \$35,000

DUNCAN, ROBERT A. THE EVOLUTION OF VOLCANISM IN THE COAST RANGE, OREGON AND WASHINGTON (EAR-8205719); 24 MONTHS \$50,000

HART, ROGER A. K-AR STUDIES OF CHERTS, EVAPORITES, AND CARBONATES (EAR-8206031); 12 MONTHS \$30,900

UNIVERSITY OF OREGON - EUGENE

GRAY, JANE. PRE-DEVONIAN LAND PLANT EVOLUTION AND PALEOECOLOGY (EAR-8006320 A01); 12 MONTHS \$37,522

WAPP, HARVE S. THE NATURE OF FLUID DISTRIBUTION IN PARTIALLY MOLTEN SILICATES AND MAGMA MOBILIZATION (EAR-8025725 A01); 12 MONTHS \$47,600

ORR, WILLIAM N. OLIGOCENE STRATIGRAPHY OF THE OREGON WESTERN CASCADES (EAR-8108729 A01); 12 MONTHS \$29,600

HOLSER, WILLIAM T. GEOCHEMISTRY OF PERMIAN-TRIASSIC SEAS: TRACE ELEMENT AND STRONTIUM ISOTOPE ANALYSIS OF CONODONT APATITE (EAR-8115985); 12 MONTHS \$93,600

MCBIRNEY, ALEXANDER R. PHYSICAL PROCESSES OF IGNEOUS DIFFERENTIATION (EAR-8121061); 12 MONTHS \$68,100

RICE, JACK M. METAMORPHISM AND MIXED-VOLATILE EQUILIBRIA OF CALCILICATE AND RELATED ROCKS (EAR-8200169); 12 MONTHS \$37,500

HOLSER, WILLIAM T. THE INITIAL ATLANTIC RIFT: EVAPORITES FROM DSDP SITE 546 AND MOROCCO (OCE-8200221*); 18 MONTHS \$40,000

WEILL, DANIEL F. THERMODYNAMIC INVESTIGATIONS OF ROCK-FORMING SILICATE MELTS (EAR-8201971); 12 MONTHS \$60,400

PENNSYLVANIA

BRYN MAWR COLLEGE

CRAWFORD, MARIA L. STUDY OF METAMORPHISM AND DEFORMATION IN THE COAST OROGEN, BRITISH COLUMBIA AND ALASKA (EAR-8100398 A01); 12 MONTHS \$19,300

SAUNDERS, W BRUCE. GROWTH AND STATUS OF NAUTILUS IN ITS NATURAL HABITAT (EAR-8100629 A01); \$4,000

FRANKLIN AND MARSHALL COLLEGE

WIEBE, ROBERT A. ANORTHOSITE GENESIS AND COMPOSITION OF THE PROTEROZOIC LITHOSPHERE, NAIN, LABRADOR (PETROGENESIS AND MINERAL RESOURCES) (EAR-8117757); 24 MONTHS \$53,045

THOMAS, ROGER D. TERMINAL CRETACEOUS EXTINCTION: A COMPARATIVE ASSESSMENT OF CAUSES (SYMPOSIUM), WASHINGTON, D.C., JANUARY 5, 1982 (EAR-8120805); 6 MONTHS \$3,200

PRESTEGAARD, KAREN L. DOWNSTREAM HYDRAULIC GEOMETRY OF RIFFLES AND POOLS (EAR-8205889); 24 MONTHS \$40,873

LEHIGH UNIVERSITY

GOLDSTEIN, JOSEPH I. THE EFFECTS OF PHOSPHORUS ON THE DEVELOPMENT OF THE STRUCTURE OF IRON METEORITES (EAR-7900995 A02); 12 MONTHS \$50,500

PENNSYLVANIA STATE UNIVERSITY

WHITE, WILLIAM B. STRUCTURAL CHARACTERIZATION OF MINERALS BY RAMAN SPECTROSCOPY (EAR-7921352 A01); 12 MONTHS \$39,000

LASAGA, ANTONIO C. THEORETICAL, EXPERIMENTAL & FIELD STUDY OF DIFFUSION & GROWTH IN METAMORPHISM & SILICATE MELTS (EAR-8007755 A02); 12 MONTHS \$43,200

OHMOTO, HIROSHI. STABLE ISOTOPE GEOCHEMISTRY OF HYDROTHERMAL SYSTEMS (EAR-8007839 A02); 12 MONTHS \$65,600

EGGLER, DAVID H. INVESTIGATION OF MAGMA GENERATION IN THE UPPER MANTLE, WITH EMPHASIS ON KIMBERLITES, ARC THOLEIITES, ANDESITES, AND METASOMATISM (EAR-8022262 A01); 12 MONTHS \$83,900

KERRICK, DERRILL M. AND LASAGA, ANTONIO C. KINETIC STUDY OF METAMORPHIC REACTIONS (EAR-8026073 A01); 12 MONTHS \$69,100

ROSE, ARTHUR W. STRATIFORM COPPER, COPPER-COBALT AND COPPER-URANIUM DEPOSITS IN SEDIMENTARY ROCKS (EAR-8026454 A01); 12 MONTHS \$70,400

OHMOTO, HIROSHI. U.S.-JAPAN-CANADA COOPERATIVE RESEARCH PROJECT ON THE GENESIS OF VOLCANOGENIC MASSIVE SULFIDE DEPOSITS (EAR-8109270 A01); \$189,200

SCHOLTEN, ROBERT, AND LEW, LAURENCE. DOCTORAL DISSERTATION: RESEARCH IN EARTH SCIENCES (EAR-8117006); 24 MONTHS \$5,000

SLINGERLAND, RUDY L. EXPERIMENTAL STUDY OF PLANE-BED BED-LOAD TRANSPORT AND RESULTING LAMINAE (EAR-8117050); 12 MONTHS \$25,546

BRINDLEY, GEORGE W. MIXED HYDROXIDE LAYER STRUCTURES (EAR-8119339); 24 MONTHS \$39,300

TRAVERSE, ALFRED. PALEOPALYNOLOGY, BIOSTRATIGRAPHY, AND PALEOENVIRONMENTS OF THE EUREKA SOUND FORMATION, CANADIAN ARCTIC ARCHIPELAGO (EAR-8119546); 12 MONTHS \$18,800

DEINES, PETER. STABLE ISOTOPE STUDIES OF DIAMONDS AND MANTLE XENOLITHS (EAR-8120177); 12 MONTHS \$45,200

TRAVERSE, ALFRED. PALYNOLOGICAL BIOSTRATIGRAPHY OF CONTINENTAL UPPER TRIASSIC-LOWER JURASSIC ROCKS OF NORTH AMERICA (EAR-8204410); 8 MONTHS \$42,000

ALEXANDER, SHELTON S. INVESTIGATION OF SEISMIC PRECURSORY PHENOMENA USING HIGH QUALITY TELESEISMIC OBSERVATIONS (EAR-8206271); 12 MONTHS \$55,000

WRIGHT, LAUREN A. CENOZOIC EVOLUTION OF THE DEATH VALLEY REGION, CALIFORNIA (EAR-8206627); 24 MONTHS \$81,207

EGGLER, DAVID H. GEOCHEMISTRY OF AN EOCENE VOLCANIC COMPLEX, MONTANA: AN INVESTIGATION OF CRUSTAL CONTAMINATION IN THE EVOLUTION OF CONTINENTAL BASALTS (EAR-8206769); 12 MONTHS \$21,800

BARNES, H L. ORE MINERAL SOLUBILITIES (EAR-8206777); 12 MONTHS \$79,900

VOIGHT, BARRY. TJORNES FRACTURES ZONE TECTONIC PROJECT, NORTHERN ICELAND (EAR-8206930); 12 MONTHS \$47,277

TEMPLE UNIVERSITY

ANDERSON, EDWIN J. AND GOODWIN, PETER W.; A STRATIGRAPHIC STUDY OF THE HELDERBERG GROUP OF NEW YORK STATE AS A TEST OF THE HYPOTHESIS OF PUNCTUATED AGGRADATIONAL CYCLES (EAR-810769) A01; 12 MONTHS \$32,800

ULMER, GENE C.; A STUDY OF THE GEOCHEMICAL ASSOCIATION OF CARBON AND PLATINUM IN THE STILLWATER AND BUSHVELD IGNEOUS COMPLEXES (EAR-8108732); 20 MONTHS \$54,000

UNIVERSITY OF PITTSBURGH

ANDERSON, THOMAS H.; THE NATURE OF THE MOJAVE-SONORA MEGASHEAR AND ITS ASSOCIATED ROCKS AND THEIR ROLE IN THE GEOTECTONIC EVOLUTION OF MEXICO (EAR-8111503); 24 MONTHS \$74,571

RHODE ISLAND

BROWN UNIVERSITY

GILETTI, BRUNO J.; KINETIC STUDIES OF GEOLOGICAL PROCESSES (EAR-7921460) A02; 12 MONTHS \$95,700

TULLIS, JAN; DEFORMATION MICROSTRUCTURES IN QUARTZ AND FELDSPAR: STEADY STATE RELATIONS AND RECOVERY KINETICS (EAR-7926348) A02; 12 MONTHS \$57,000

YUND, RICHARD A.; KINETICS AND MECHANISMS OF SELECTED MINERALOGICAL PROCESSES (EAR-7926370) A02; 12 MONTHS \$69,800

RUTHERFORD, MALCOLM J.; EQUILIBRIUM AND FRACTIONAL CRYSTALLIZATION OF LUNAR MAGMAS (EAR-8108554) A01; 12 MONTHS \$61,000

HESS, PAUL C.; STRUCTURE OF SILICATE MELTS: AN EXPERIMENTAL STUDY OF HOMOGENEOUS AND HETEROGENEOUS EQUILIBRIA (EAR-8115996); 12 MONTHS \$44,200

HERMANCE, JOHN F.; CRUSTAL GENESIS IN THE NEOVOLCANIC ZONE OF ICELAND: CONSTRAINTS FROM ELECTROMAGNETIC STUDIES OF THE CRUST AND MANTLE (EAR-8121236); 12 MONTHS \$60,000

TULLIS, JAN; THE BRITTLE-DUCTILE TRANSITION IN SHEARED GRANITIC ROCKS (EAR-8121438); 12 MONTHS \$19,500

GILETTI, BRUNO J.; SUPPORT OF M.I.T.-BROWN-HARVARD REGIONAL ION MICROPROBE FACILITY (EAR-8201402); 12 MONTHS \$32,000

PARMENTIER, E M.; STUDIES OF FLUID TRANSPORT IN CRUSTAL ROCKS ASSOCIATED WITH IGNEOUS INTRUSIONS: THEORETICAL INTERPRETATIONS BASED ON OXYGEN ISOTOPE DATA (EAR-8205825); 12 MONTHS \$33,300

GROMET, I. PETER; PETROLOGICAL AND GEOCHEMICAL STUDIES ON THE ST. URBAIN ANORTHOSITE, QUEBEC, CANADA (EAR-8206659); 12 MONTHS \$35,100

TULLIS, TERRY E.; ROCK FRICTION CONSTITUTIVE EXPERIMENTS AS RELATED TO THEORY OF EARTHQUAKES INSTABILITY (EAR-8207062); 12 MONTHS \$95,000

UNIVERSITY OF RHODE ISLAND-GRADUATE SCHOOL OF OCEANOGRAPHY

SIGURDSSON, HARALDUR; COLLABORATIVE RESEARCH ON THE ROLE OF VOLATILES IN LESSER ANTILLES ISLAND ARC MAGMAS (EAR-8018809) A02; \$1,000

BARTON, CHARLES E.; PALEOMAGNETISM OF LAKE SEDIMENTS IN KENYA (EAR-8119464); 12 MONTHS \$43,600

SIGURDSSON, HARALDUR; COMPUTER MODELLING OF TEPHRA FALLOUT FROM EXPLOSIVE ERUPTIONS (EAR-8205955); 12 MONTHS \$31,775

SIGURDSSON, HARALDUR; COMPUTER MODELLING OF TEPHRA FALLOUT FROM EXPLOSIVE ERUPTIONS (SUPPLEMENT) (EAR-8205955) A01; 6 MONTHS \$7,828

BENDER, MICHAEL L.; STRONTIUM ISOTOPE GEOCHEMISTRY OF THE CENOZOIC OCEAN (OCE-8207787)*; 30 MONTHS \$70,000

UNIVERSITY OF RHODE ISLAND

BARTON, CHARLES E.; TIME SERIES ANALYSIS OF PALEOMAGNETIC DATA AND THE GEOMAGNETIC SPECTRUM (EAR-8201577); 12 MONTHS \$27,400

HERMES, O DON; GEOLOGY AND PETROLOGY OF THE LATE PRECAMBRIAN TO MID-PALEOZOIC PLUTONIC ROCKS OF RHODE ISLAND (EAR-8206149); 12 MONTHS \$21,900

SOUTH CAROLINA

UNIVERSITY OF SOUTH CAROLINA AT COLUMBIA

HATCHER, ROBERT D.; INTERNAL AND EXTERNAL BASEMENT MASSIFS OF THE SOUTHERN APPALACHIANS: TECTONIC ROLE AND LOCALIZATION OF THRUST SHEETS (EAR-8108501) A01; 12 MONTHS \$39,897

TALWANI, PRADEEP, AND CHUNG, WAI-YING; CRUSTAL STRUCTURE STUDIES IN SOUTHEAST U.S. USING SEISMOLOGICAL TECHNIQUES (EAR-8115855); 12 MONTHS \$51,300

HAYES, MILES O.; HOLOCENE EVOLUTION OF THE SANTEE DELTA (EAR-8121092); 12 MONTHS \$35,600

ARTHUR, MICHAEL A.; STRATIGRAPHIC, STABLE ISOTOPIC, AND GEOCHEMICAL STUDIES OF MODERN AND ANCIENT MARINE PHOSPHORITES (EAR-8200581); 24 MONTHS \$73,064

HATCHER, ROBERT D.; COLLABORATIVE INVESTIGATION OF THE ALTO ALLOCHTHON: ITS ORIGIN, TECTONOTHERMAL HISTORY, AND SIGNIFICANCE IN THE EVOLUTION OF CRYSTALLINE THRUST SHEETS (EAR-8206949); 12 MONTHS \$22,188

UNIVERSITY OF SOUTH CAROLINA CENTRAL OFFICE

COHEN, ARTHUR D.; GEOLOGIC AND COAL PETROLOGIC INVESTIGATION OF THE OKEFENOKE SWAMP, GEORGIA (EAR-8201083)*; 12 MONTHS \$44,700

SOUTH DAKOTA

SOUTH DAKOTA SCHOOL OF MINES AND TECHNOLOGY

PAPIKE, JAMES J.; MINERAL DEPOSITS OF THE BLACK HILLS, SOUTH DAKOTA: PETROGENESIS OF GRANITIC PEGMATITES (EAR-8207452); 12 MONTHS \$25,000

TENNESSEE

VANDERBILT UNIVERSITY

MILLER, CALVIN F.; PERALUMINOUS TRONDHJEMITES, BLUE RIDGE PROVINCE, NORTH CAROLINA PETROLOGIC AND TECTONIC SIGNIFICANCE (EAR-8109055) A01; 12 MONTHS \$24,300

SIESSER, WILLIAM G.; CORRELATION OF GULF COAST PROVINCIAL PALEOGENE STAGES WITH EUROPEAN STANDARD STAGES (EAR-8113069); 12 MONTHS \$21,500

MILLER, MOLLY F.; DEPOSITIONAL ENVIRONMENTS AND BIOGENIC STRUCTURES OF PENNSYLVANIAN SEDIMENTARY ROCKS, NORTHERN CUMBERLAND PLATEAU, TENNESSEE (EAR-8121706); 24 MONTHS \$38,300

TEXAS

NORTH TEXAS STATE UNIVERSITY

HALL, STEPHEN A.; HOLOCENE VEGETATION AND CLIMATE IN THE SOUTHERN ROCKY MOUNTAINS OF NEW MEXICO (EAR-7911158) A02; 12 MONTHS \$26,100

RICE UNIVERSITY

LEEMAN, WILLIAM P.; THE ROLE OF DEEP CRUSTAL ROCKS IN THE GENESIS OF SILICIC MAGMAS - SNAKE RIVER PLAIN, IDAHO (EAR-8018580) A01; 12 MONTHS \$33,997

LEEMAN, WILLIAM P.; A FACILITY FOR THE CHEMICAL CHARACTERIZATION OF NATURAL MATERIALS (EAR-8103346); 12 MONTHS \$15,000

OLDOW, JOHN S.; TECTONIC EVOLUTION AND PALEOGEOGRAPHIC RECONSTRUCTION OF A LATE MESOZOIC FOLD AND THRUST BELT IN WEST-CENTRAL NEVADA (EAR-8107673) A01; 12 MONTHS \$27,935

VALLEY, JOHN W.; FLUID VERSUS MAGMATIC PROCESSES OF CRUSTAL CONTAMINATION OF ANORTHOSITE, ADIRONDACK MOUNTAINS, N.Y. (EAR-8121214); 12 MONTHS \$72,100

AVE LALLEMANT, HANS G.; STRUCTURE AND TECTONICS OF THE BLUE MOUNTAINS REGION, NE OREGON, AND ADJACENT AREAS IN IDAHO (EAR-8206531); 12 MONTHS \$28,610

SOUTHERN METHODIST UNIVERSITY

HOLDAWAY, MICHAEL J.; STABILITY RELATIONS OF SILICATES IN THE SYSTEM K₂O-FeO-Al₂O₃-SiO₂-H₂O BASED ON FIELD, EXPERIMENTAL AND THEORETICAL STUDIES (EAR-8025891) A01; 12 MONTHS \$34,800

DUNGAN, MICHAEL A.; PETROLOGIC AND GEOCHEMICAL STUDIES OF LATE CENOZOIC VOLCANISM ASSOCIATED WITH NORTHERN RIO GRANDE RIFT, NORTHERN NEW MEXICO AND SOUTH-CENTRAL COLORADO (EAR-8026451) A01; 12 MONTHS \$34,000

TEXAS A & M UNIVERSITY

STANTON, ROBERT J. AND POWELL, ERIC N.; RECONSTRUCTING THE PALEO COMMUNITY FROM THE FOSSIL ASSEMBLAGE-COMPARATIVE ANALYSIS OF LIVING COMMUNITIES AND DEATH ASSEMBLAGES IN TEXAS BAYS (EAR-8021164) A01; 12 MONTHS \$56,600

BROWN, J M.; SHOCK-WAVE RAREFACTION VELOCITY MEASUREMENTS ON CANDIDATE CORE MATERIALS (EAR-8109591); 24 MONTHS \$74,000

FLETCHER, RAYMOND C.; MECHANICS OF SOLUTION SURFACES IN PRESSURE SOLUTION (EAR-8115913); 24 MONTHS \$73,030

FRIEDMAN, MELVIN; INVESTIGATION OF BULK MECHANICAL BEHAVIOR, DEFORMATION MECHANISMS, AND MICROSTRUCTURES IN EXPERIMENTAL SHEAR ZONES (EAR-8200726); 12 MONTHS \$38,056

UNIV OF TEXAS AT AUSTIN-MARINE SCIENCE INSTITUTE AT GALVESTON

TAYLOR, FREDERICK W.; SCLEROCHRONOMETRY OF RECURRING COSEISMIC UPLIFTS (EAR-7919912) A02; 24 MONTHS \$42,652

TAYLOR, FREDERICK W.; QUATERNARY TECTONICS OF THE DOMINICAN REPUBLIC FROM EMERGED CORAL REEF TERRACES (EAR-8109592); 24 MONTHS \$57,294

UNIV OF TEXAS AT AUSTIN

SMITH, DOUGLAS, AND WILSON, CLARK; MEASUREMENT AND INTERPRETATION OF COMPOSITIONAL GRADIENTS IN PERIDOTITE (EAR-8108578) A01; 12 MONTHS \$47,988

LAND, LYNTON S.; SUBSURFACE CARBON DIOXIDE - IMPLICATIONS FOR BURIAL DIAGENESIS (EAR-8121009); 12 MONTHS \$45,582

MOSEH, SHARON; ALLEGHENIAN DEFORMATION IN SOUTHEASTERN NEW ENGLAND (EAR-8121294); 12 MONTHS \$30,012

WARREN, JOHN K.; SEDIMENTOLOGICAL AND HYDROLOGICAL SIGNIFICANCE OF STRUCTURES AND FABRICS IN THE DOLOMITIC CARBONATES OF THE COORONG REGION, SOUTH AUSTRALIA (EAR-8206146); 12 MONTHS \$25,800

UNIV OF TEXAS AT DALLAS

PRESNALL, DEAN C.; MINERALOGICAL, CHEMICAL, AND PHASE EQUILIBRIUM STUDIES BEARING ON MANTLE EVOLUTION AND THE GENERATION AND CRYSTALLIZATION OF BASALTIC MAGMA (EAR-8018359) A01; 12 MONTHS \$65,600

MITTERER, RICHARD M.; RACEMIZATION OF AMINO ACIDS: KINETICS, MECHANISM AND GEOLOGICAL APPLICATIONS (EAR-8115843); 24 MONTHS \$128,820

PESSAGNO, EMILE A. AND LONGORIA, JOSE F.; BIOSTRATIGRAPHIC INVESTIGATIONS OF UPPER JURASSIC RADIOLARIA AND ASSOCIATED

MICROFOSSILS IN EAST-CENTRAL MEXICO (EAR-8121550); 12 MONTHS \$43,633

PESSAGNO, EMILE A. AND LONGORIA, JOSE F. BIOSTRATIGRAPHIC INVESTIGATIONS OF UPPER JURASSIC RADIOLARIA AND ASSOCIATED MICROFOSSILS IN EAST-CENTRAL MEXICO (EAR-8121550 A01); \$15,000

STERN, ROBERT J. CRUSTAL EVOLUTION IN THE NE DESERT AND SINAI, EGYPT (EAR-8205802); 12 MONTHS \$35,000

UNIV OF TEXAS AT EL PASO

KELLER, G R. A COOPERATIVE SEISMIC REFRACTION PROFILING EXPERIMENT IN THE RIO GRANDE RIFT (EAR-8025371 A01); 12 MONTHS \$45,000

LEMONE, DAVID V. SYMPOSIUM ON WAULSORTIAN REEF-LIKE FACIES IN CARBONATE ROCKS EL PASO, TEXAS, MARCH 2 - 6, 1982 (EAR-8121116); 6 MONTHS \$4,845

UNIV OF TEXAS AT SAN ANTONIO

SWANSON, ERIC R. VOLCANO-STRATIGRAPHIC STUDIES IN THE GUADIANA VALLEY, DURANGO, MEXICO (EAR-8108734 A01); \$12,367

UNITED KINGDOM

UNIVERSITY OF READING

HUGHES, ANTHONY A. PARTIAL SUPPORT OF THE INTERNATIONAL SEISMOLOGICAL CENTRE (EAR-8107865 A01); 12 MONTHS \$90,400

UTAH

BRIGHAM YOUNG UNIVERSITY

RIGBY, J KEITH. SYSTEMATIC STUDIES OF FOUR MAJOR ORDOVICIAN SPONGE FAUNAS FROM NORTH AMERICA AND AUSTRALIA (DEB-8200860*); 36 MONTHS \$30,000

RIGBY, J KEITH. PALEONTOLOGY AN DEPOSITIONAL ENVIRONMENTS OF THE MIDDLE CAMBRIAN MARJUM AND WHEELER FORMATIONS, HOUSE RANGE, UTAH (EAR-8201428*); 24 MONTHS \$35,000

UNIVERSITY OF UTAH

EKDALE, ALLAN A. BIOTURBATION, ICHNOLOGY AND EARLY DIA-GENESIS OF UPPER CRETACEOUS CHALK, DENMARK (EAR-8108566 A01); 12 MONTHS \$38,200

HOHMANN, GERALD W. WARD, STANLEY H. AND SILL, WILLIAM R. GREAT BASIN - COLORADO PLATEAU MAGNETOTELLURIC INVESTIGATION (EAR-8116602); 12 MONTHS \$95,000

WEBER STATE COLLEGE

MURPHY, DON R. ACQUISITION OF VEHICLE FOR FIELD RESEARCH IN GEOLOGY AND OTHER DISCIPLINES (PRM-8117117*); 12 MONTHS \$8,355

VIRGINIA

AMERICAN GEOLOGICAL INSTITUTE

UNKLESBAY, A G. TRAVEL OF UNITED STATES SCIENTISTS TO XITH CONGRESS OF INTERNATIONAL ASSOCIATION FOR QUATERNARY RESEARCH, MOSCOW, USSR, AUGUST 1-9, 1982 (OAR-8206681*); 6 MONTHS \$5,000

DEPARTMENT OF NAVY-OFFICE OF NAVAL RESEARCH

HAMILTON, GORDON R. SUPPORT FOR THE NATIONAL ACADEMY OF ENGINEERING MARINE BOARD (OCE-8006009 A02*); 12 MONTHS \$12,000

HAMILTON, GORDON R. SUPPORT OF THE 1982 JOINT OCEANOGRAPHIC ASSEMBLY TRAVEL GRANTS PROGRAM (OCE-8117669); 12 MONTHS \$24,000

HAMILTON, GORDON R. SUPPORT OF THE NATIONAL ACADEMY OF SCIENCES' OCEAN SCIENCES BOARD (OSB) (OCE-8203762); 12 MONTHS \$45,000

GEORGE MASON UNIVERSITY

DIECCHIO, RICHARD J. FOURTH INTERNATIONAL SYMPOSIUM ON THE ORDOVICIAN SYSTEM, OSLO, NORWAY, AUGUST 20-23, 1982 (EAR-8200420); 6 MONTHS \$6,000

OLD DOMINION UNIVERSITY

WHITTECAR, G RICHARD. ACQUISITION OF MOBILE DRILLING RIG FOR RESEARCH ON OUTER COASTAL PLAIN (PRM-8206042*); 12 MONTHS \$17,495

VIRGINIA POLYTECHNIC INSTITUTE

GIBBS, GERALD V. AND RIBBE, PAUL H. STRUCTURE OF BONDING MINERALS (EAR-7723114 A04); 12 MONTHS \$76,600

GLOVER, LYNN, AND COSTAIN, JOHN K. SEISMIC REFLECTION MAP- PING IN APPALACHIAN CORRIDORS (EAR-8009549 A02); 12 MONTHS \$202,000

READ, JAMES F. SEDIMENTOLOGIC EVOLUTION AND PLATFORM TYPES, CAMBRIAN-ORDOVICIAN PASSIVE MARGIN, VIRGINIA APPALACHIAN (EAR-8108577 A01); 12 MONTHS \$24,600

GRAY, DAVID R. IMPLICATIONS OF INCREMENTAL STRAIN AND ME- SOSCOPIC STRUCTURE OF TECTONIC EVOLUTION OF THE VALLEY & RIDGE PROVINCE OF SOUTHWEST VIRGINIA (EAR-8120948); 24 MONTHS \$55,947

SINHA, AKHAURY K. ISOTOPIC AND GEOCHEMICAL CHARACTERIZA- TION OF GRANULITES FROM VIRGINIA AND THE BALTIMORE MAFIC COMPLEX, MARYLAND (EAR-8206822); 12 MONTHS \$29,336

WONES, DAVID R. MISCELLANEOUS PETROLOGIC PROBLEMS IN EASTERN MAINE (EAR-8206825); 12 MONTHS \$48,000

WASHINGTON

UNIVERSITY OF WASHINGTON

BOOKER, JOHN R. SIMULTANEOUS ESTIMATION OF EARTHQUAKE HYPOCENTERS AND SEISMIC VELOCITY STRUCTURE (EAR-7910605 A01); 24 MONTHS \$87,000

RAYMOND, CHARLES F. COLLABORATIVE RESEARCH ON SURGES OF VARIATED GLACIER (EAR-7919424 A02); 12 MONTHS \$41,400

CROSSON, ROBERT S. STRUCTURE AND COMPOSITION OF THE CRUST IN THE VICINITY OF MT. ST. HELENS, WASHINGTON (EAR-8025871 A01); 12 MONTHS \$50,400

STUIVER, MINZE. ELEVENTH INTERNATIONAL RADIOCARBON CON- FERENCE (ATM-8107137*); 12 MONTHS \$6,000

HALL, BERNARD. THE MECHANICS OF GLACIAL EROSION (EAR- 8108308 A02*); 4 MONTHS \$8,971

BOOKER, JOHN R. INDUCTION STUDIES IN THE PACIFIC NORTHWEST (EAR-8109462 A01); 12 MONTHS \$50,000

RENSBERGER, JOHN M. AND BARNOSKY, ANTHONY D. DOCTORAL DISSERTATION RESEARCH IN EARTH SCIENCES (EAR-8110865); 24 MONTHS \$3,000

EVANS, BERNARD W. STABILITY AND THERMODYNAMIC PROPER- TIES OF GLAUCOPHANE (EAR-8115264); 12 MONTHS \$27,400

MERRILL, RONALD T. AND LARSEN, JIMMY C. WORLD-WIDE DISTRI- BUTION OF MANTLE ELECTRICAL CONDUCTIVITY: AN ANALYSIS OF MAGNETIC OBSERVATORY DAILY MEAN VALUES (EAR-8115694); 24 MONTHS \$60,000

STUIVER, MINZE. STUDIES IN ISOTOPIC CARBON WITH SPECIAL REF- ERENCE TO GEOCHRONOMETRICAL APPLICATIONS (EAR-8115994); 12 MONTHS \$63,152

JOHNSON, HARLAN P. CHARACTERIZATION OF VISCOUS MAGNETIZ- ATION IN ARTIFICIAL AND NATURAL ROCK SAMPLES (EAR-8116635); 24 MONTHS \$65,000

GHOSE, SUBRATA. SOLID STATE CHEMISTRY AND PHYSICS OF MIN- ERALS (EAR-8206526); 12 MONTHS \$78,500

QUAY, PAUL. FRESHWATER CARBON CYCLE (EAR-8206786); 12 MONTHS \$72,599

WASHINGTON STATE UNIVERSITY

HOOPER, PETER R. S.F.C. AWARD (INDIAN CURRENCY AND U.S. DOL- LARS: STRATIGRAPHY AND PETROGENESIS OF THE DECCAN BASALT PROVINCE (EAR-8116656*); 12 MONTHS \$41,900

WESTERN WASHINGTON UNIVERSITY

BROWN, EDWIN H. PETROLOGY, STRUCTURE AND GEOTECTONIC HIS- TORY OF THE SHUKSAN SUITE, NORTH CASCADES, WASHINGTON (EAR-7919734 A01); 30 MONTHS \$80,872

BECK, MYRL E. ACQUISITION OF SPINNER-MAGNETOMETER AND AC- CESSORIES (PRM-8112912*); 12 MONTHS \$34,600

BECK, MYRL E. PALEOMAGNETISM & SEDIMENTARY PETROLOGY OF LATE CRETACEOUS & TERTIARY CLASTIC SEQUENCES FROM WEST- ERN WASHINGTON: THE ROLE OF SEDIMENTARY BASINS IN TECTONIC EVOLUTION OF PACIFIC NW (EAR-8121957); 12 MONTHS \$43,852

WEST VIRGINIA

WEST VIRGINIA UNIVERSITY

TING, FRANCIS T. COMPARATIVE STUDIES OF CARBONIFEROUS AND TERTIARY-CRETACEOUS COALS AND OPTICAL PROPERTIES OF MACER- ALS (EAR-7912533 A01); 12 MONTHS \$25,472

WISCONSIN

MILWAUKEE PUBLIC MUSEUM

SHEEHAN, PETER M. UPPER ORDOVICIAN STRATIGRAPHY AND BRACHIOPOD FAUNAS IN THE EASTERN GREAT BASIN (EAR-7901013 A01); 24 MONTHS \$51,819

UNIVERSITY OF WISCONSIN-MADISON

HASTENRATH, STEFAN L. TROPICAL GLACIER SYSTEMS AND CLI- MATE (EAR-7923897 A01); 12 MONTHS \$32,431

CLAY, CLARENCE S. ANALYSIS OF VIBROSEIS MEASUREMENTS ON THE NORTH AMERICAN CRATON (EAR-7926373 A01); 12 MONTHS \$18,900

MEYER, ROBERT P. THE INTERMEDIATE-DEPTH EARTHQUAKES OF THE BUCARAMANGA NEST AND THE TECTONICS OF WESTERN COLOM- BIA (EAR-8019699 A01); 12 MONTHS \$40,000

BAILEY, STURGES W. STRUCTURES OF LAYER SILICATE MINERALS (EAR-8106124 A01); 12 MONTHS \$44,500

DOTT, ROBERT H. CAMBRIAN SEDIMENTOLOGY IN THE UPPER MID- WEST (EAR-8107729 A01); 12 MONTHS \$74,300

KNOX, JAMES C. RESPONSES OF MIDWEST RIVER SYSTEMS TO HOLO- CENE CLIMATES (EAR-8108721 A01); 12 MONTHS \$39,979

MEYER, ROBERT P. GEOPHYSICAL INVESTIGATION OF THE SLATE IS- LANDS AREA OF LAKE SUPERIOR (EAR-8116502*); 12 MONTHS \$29,100

WANG, HERBERT F. MICROCRACK STUDY OF ILLINOIS DEEP HOLE GRANITE (EAR-8116730); 12 MONTHS \$29,800

MEYER, ROBERT P. ANALYSIS OF DIGITAL SEISMIC DATA FROM A CLOSE-ORDER ARRAY, NEW MADRID SEISMIC ZONE (EAR-8201973); 12 MONTHS \$20,000

UNIVERSITY OF WISCONSIN-OSHKOSH

JONES, NORRIS W. ACQUISITION OF RESEARCH MICROSCOPE AND ACCESSORIES FOR GEOLOGICAL RESEARCH (PRM-8119785*); 12 MONTHS \$23,471

WYOMING

UNIVERSITY OF WYOMING

SMITHSON, SCOTT B. AND HOUSTON, ROBERT S. GEOPHYSICAL AND GEOLOGICAL STUDIES OF A MAJOR PRECAMBRIAN CRUSTAL DISCONTINUITY IN SOUTHEASTERN WYOMING (EAR-8026580 A01); 12 MONTHS \$42,500

STEINER, MAUREEN B. GEOMAGNETIC POLARITY DURING THE JURASSIC (EAR-8107739 A01); 12 MONTHS \$52,800

SMITHSON, SCOTT B. AND QUINCY, EDMUND A. INTERPRETATION OF COCORP REFLECTION PROFILES FOR CONTRASTING CRUSTAL STRUCTURE (EAR-8108725 A01); 12 MONTHS \$50,000

SMITHSON, SCOTT B. QUINCY, EDMUND A. AND HOUSTON, ROBERT S. APPLICATION OF HIGH-RESOLUTION SEISMIC REFLECTION STUDIES TO MINING EXPLORATION (EAR-8108740*); 12 MONTHS \$60,000

STEIDTMANN, JAMES R. LARAMIDE BASEMENT UPLIFT AND BASIN SUBSIDENCE IN THE WIND RIVER MOUNTAINS (EAR-8108838 A01); 12 MONTHS \$39,500

LILLEGRAVEN, JASON A. LATE CRETACEOUS AND EARLY PALEOCENE MAMMALIAN FAUNAS, CENTRAL AND NORTH-CENTRAL WYOMING (EAR-8205211*); 12 MONTHS \$29,800

STEINER, MAUREEN B. MAGNETIZATION IN SPECULARITE (EAR-8206199); 12 MONTHS \$44,800

SHIVE, PETER N. LABORATORY STUDIES OF DEPOSITION REMANENT MAGNETIZATION (EAR-8206273); 12 MONTHS \$26,500

MYERS, JAMES D. MAGMA INTERACTION AND MIXING: A NEW MODEL FOR BASALT-AND ANDESITE-DACITE-RHYOLITE (EAR-8207063); 12 MONTHS \$28,000

FROST, B RONALD. GEOLOGIC AND GEOPHYSICAL STUDIES OF ARCHEAN CRUST IN THE WIND RIVER MOUNTAINS: AN APPROACH TO UNDERSTANDING DEEP SEISMIC REFLECTIONS (EAR-8207343); 12 MONTHS \$23,039

FROST, B RONALD. GEOTHERMOMETRY AND GEOBAROMETRY OF THE SYENITES AND HORNFELSSES ASSOCIATED WITH THE LARAMIE ANORTHOSITE (EAR-8207433); 12 MONTHS \$19,000

SURDAM, RONALD C. A DIAGENETIC MODEL FOR THE MONTEREY FORMATION, PISMO AND HUASNA BASINS, CALIFORNIA (EAR-8207570); 12 MONTHS \$29,411

OCEAN SCIENCES

ALASKA

UNIVERSITY OF ALASKA FAIRBANKS CAMPUS-INSTITUTE OF MARINE SCIENCE

ROYER, THOMAS C. RECIRCULATION IN THE NORTH PACIFIC SUBARCTIC GYRE (OCE-8018336 A01); 12 MONTHS \$93,492

DIETER, EMMA R. SHIPBOARD TECHNICIAN SUPPORT (OCE-8023171 A01); 12 MONTHS \$89,324

DIETER, EMMA R. SHIP OPERATIONS SUPPORT (OCE-8023269 A01); 12 MONTHS \$1,001,010

NIEBAUER, HENRY J. AND ALEXANDER, VERA D. DYNAMICS OF AN ICE-EDGE ZONE (OCE-8024058 A01*); 24 MONTHS \$55,361

REEBURGH, WILLIAM S. STUDIES OF THE SULFATE-METHANE TRANSITION ZONE (OCE-8117882); 12 MONTHS \$116,197

DIETER, EMMA R. SHIPBOARD SCIENTIFIC SUPPORT EQUIPMENT (OCE-8118725); 12 MONTHS \$94,980

ROYER, THOMAS C. OCEANOGRAPHIC INSTRUMENTATION (OCE-8118727); 12 MONTHS \$47,924

DIETER, EMMA R. CONVERSION AND UPGRADING OF R/V ALPHA HELIX (OCE-8200476); 12 MONTHS \$258,100

DIETER, EMMA R. CONVERSION AND UPGRADING OF R/V ALPHA HELIX (OCE-8200476 A01); 6 MONTHS \$24,570

GOERING, JOHN J. AND ALEXANDER, VERA D. QUANTITATIVE ACOUSTIC SAMPLING SYSTEM FOR MARINE BIOLOGICAL RESEARCH (OCE-8208380*); 12 MONTHS \$50,500

ARIZONA

ARIZONA STATE UNIVERSITY

BUSECK, PETER R. MANGANESE OXIDE MINERALOGY OF MANGANESE NODULES (OCE-8200118); 12 MONTHS \$49,607

BERMUDA

BERMUDA BIOLOGICAL STATION FOR RESEARCH INC

KNAP, ANTHONY H. AND WRIGHT, WILLIAM R. PANULIRUS HYDROGRAPHIC S. ACTIONS (OCE-8116410*); 12 MONTHS \$34,250

CALIFORNIA

CALIFORNIA INSTITUTE OF TECHNOLOGY

WASSERBURG, GERALD J. INVESTIGATION OF THE MARINE GEOCHEMISTRY OF THE RARE EARTH ELEMENTS USING ND ISOTOPES (OCE-8108585 A01); 12 MONTHS \$83,950

PATTERSON, CLAIR C. SEA-AIR EXCHANGE PROJECT: SEAREX EXCHANGE OF PB, CA, SR, BA, K, RB, CS (OCE-8111893 A01); 12 MONTHS \$133,917

PATTERSON, CLAIR C. THE OCCURRENCE OF COMMON LEAD IN THE OPEN OCEAN (OCE-8113211); 12 MONTHS \$61,673

CALIFORNIA STATE UNIVERSITY, FULLERTON

HORN, MICHAEL H. FEEDING ECOLOGY AND DIGESTIVE PHYSIOLOGY OF HERBIVOROUS FISHES IN TEMPERATE MARINE WATERS (OCE-8108589); 12 MONTHS \$67,993

CALIFORNIA STATE UNIVERSITY, LONG BEACH

GEESEY, GILL G. SUBSTRATE-BINDING COMPONENTS OF MARINE BACTERIA: ROLE IN THE PARTITIONING OF SMALL ORGANIC MOLECULES BETWEEN THE DISSOLVED AND PARTICULATE POOLS IN SEA WATER (OCE-8208215); 24 MONTHS \$29,648

SAN DIEGO STATE UNIVERSITY

NOORANY, IRAJ. GEOTECHNICAL PROPERTIES OF MARINE SEDIMENTS: DSDP LEG 75 SAMPLES (OCE-8118044); 12 MONTHS \$24,100

SAN FRANCISCO STATE UNIVERSITY

PAMATMAT, MARIO M. ANAEROBIC METABOLISM ON MARINE BENTHOS (OCE-8003197 A02); 12 MONTHS \$27,900

SAN JOSE STATE UNIVERSITY

BROENKOW, WILLIAM W. OCEANOGRAPHIC SUPPORT FOR VERTICAL TRANSPORT STUDIES (OCE-7926797 A01); \$24,368

MARTIN, JOHN H. SHIP OPERATIONS SUPPORT (OCE-8022106 A01); 12 MONTHS \$311,352

KNAUER, GEORGE A. AND MARTIN, JOHN H. 1. FIELD AND LABORATORY STUDIES OF ACUTE VERSUS CHRONIC EFFECTS OF METAL ACTIVITY ON PHYTOPLANKTON. 2. UPTAKE KINETICS OF SELECTED METALS & NUTRIENT ENRICHMENT STUDIES (OCE-8117886*); 12 MONTHS \$58,194

MARTIN, JOHN H. SHIPBOARD SCIENTIFIC SUPPORT EQUIPMENT (OCE-8119196); 12 MONTHS \$91,223

MARTIN, JOHN H. BASIC IMPROVEMENTS FOR SHIP OPERATIONS (OCE-8119512); 12 MONTHS \$53,119

MARTIN, JOHN H. OPERATION AND MAINTENANCE OF THE NSF OWNED RESEARCH VESSEL CAYUSE (OCE-8120257); 60 MONTHS \$1

BROENKOW, WILLIAM W. OCEANOGRAPHIC DATA ACQUISITION EQUIPMENT (PRM-8206793*); 12 MONTHS \$27,844

STANFORD UNIVERSITY

INGLE, JAMES C. CENOZOIC PALEOCEANOGRAPHY PROJECT (CENOP) (OCE-7918285 A02); 12 MONTHS \$38,365

TRW INC-TRW INC-REDONDO BEACH

YUEN, HENRY C. LAKE, BRUCE, AND SAFFMAN, PHILIP G. INTERACTION BETWEEN A TURBULENT WIND AND FINITE AMPLITUDE WATER WAVES (OCE-8100517 A01*); 12 MONTHS \$148,000

UNIVERSITY OF CALIFORNIA, BERKELEY

RISEBROUGH, ROBERT W. DETERMINATION OF VERTICAL FLUXES IN THE WATER COLUMN OF HIGHER-MOLECULAR WEIGHT HYDROCARBONS (OCE-8001787 A02); 12 MONTHS \$78,473

KOEHL, MIMI. FLUID MECHANICS OF COPEPOD FEEDING: SECOND MAXILLAE (OCE-8201395); 12 MONTHS \$106,778

UNIVERSITY OF CALIFORNIA, LOS ANGELES

MUSCATINE, LEONARD. PRODUCTIVITY AND NUTRIENT ASSIMILATION BY REEF CORALS (OCE-8207637); 12 MONTHS \$45,000

WASSON, JOHN T. EXTRATERRESTRIAL NOBLE METALS IN MARINE SEDIMENTS (OCE-8208197); 12 MONTHS \$92,480

UNIVERSITY OF CALIFORNIA, SAN DIEGO-SCRIPPS INSTITUTION OF OCEANOGRAPHY

YAYANOS, A A. IN SITU AND LABORATORY STUDIES WITH DEEP-SEA AMPHIPODS AND SOME OF THEIR INTERACTIONS WITH MICROBES (OCE-7908973 A02); 6 MONTHS \$20,000

VINCENT, EDITH S. AND BERGER, WOLFGANG H. CENOZOIC PALEOCEANOGRAPHY PROJECT (CENOP) (OCE-7919090 A02); 12 MONTHS \$59,970

MEYERS, GARY A. AND WHITE, WARREN B. LARGE-SCALE VARIATION IN SUBSURFACE TEMPERATURE OF THE TROPICAL PACIFIC OCEAN (OCE-7921787 A02); 12 MONTHS \$116,100

KNOX, ROBERT A. TROPICAL WIND STRESS ANALYSIS (OCE-7921836 A02); 12 MONTHS \$50,700

CUTCHIN, DAVID L. NORTH PACIFIC EXPERIMENT (NORPAX): PROJECT ADMINISTRATION (OCE-7924358 A02); 12 MONTHS \$75,000

WEISS, RAY F. NORTH ATLANTIC STUDY OF THE TRANSIENT TRACERS IN THE OCEAN PROGRAM (NAS/TTO): CARBON DIOXIDE AND NITROUS OXIDE MEASUREMENTS (OCE-7925886 A02); 12 MONTHS \$72,347

WILLIAMS, ROBERT T. NORTH ATLANTIC STUDY OF THE TRANSIENT TRACERS IN THE OCEAN PROGRAM (NAS/TTO): SHIPBOARD ANALYSES OF HYDROGRAPHIC PROPERTIES, LOGISTICS SUPPORT, AND DATA MANAGEMENT (OCE-7925890 A02); 12 MONTHS \$191,750

AZAM, FAROOQ. ROLE OF BACTERIA IN MARINE DETRITAL FOOD-CHAIN (OCE-7926458 A01); 24 MONTHS \$200,000

CRAIG, HARMON. OCEAN-ATMOSPHERE INVESTIGATIONS (OCE-7927284 A02); 12 MONTHS \$175,000

EPLEY, RICHARD W. A METHOD TO DETERMINE PHYTOPLANKTON CARBON BIOMASS AND IN SITU SPECIFIC GROWTH RATE (OCE-8008308 A01); 12 MONTHS \$50,431

WINANT, CLINTON D. AND DAVIS, RUSS E. COASTAL OCEAN DYNAMICS EXPERIMENT (CODE): THE SMALL-SCALE ARRAY (OCE-8014942 A02); 12 MONTHS \$605,900

KNOX, ROBERT A. MUNK, WALTER H. WORCESTER, PETER F. AND ZETLER, BERNARD D. DEVELOPMENT AND TESTING OF ACOUSTIC TECHNIQUES FOR STUDIES OF LARGE-SCALE OCEAN VARIABILITY (OCE-8017575 A01); 12 MONTHS \$364,002

LONSDALE, PETER F. AND MOORE, GREGORY F. MIDDLE AMERICA TRENCH: RECENT TECTONICS AND STRUCTURE (OCE-8018195 A02); 12 MONTHS \$64,000

KNOX, ROBERT A. AND REGIER, LLOYD A. NORTH PACIFIC EXPERIMENT (NORPAX): ANALYSIS OF EQUATORIAL UPPER OCEAN CUR-

- RENTS MEASURED WITH SHIP'S ACOUSTIC LOG (OCE-8019766 A01); 12 MONTHS \$67,600
- RIEDEL, WILLIAM R. AND DOYLE, PATRICIA S.; INTERPRETATION OF MICROSCOPIC FISH SKELETAL DEBRIS IN CENOZOIC AND MESOZOIC PELAGIC SEDIMENTS (OCE-8022236 A01); 12 MONTHS \$67,000
- KEELING, CHARLES D.; NORTH ATLANTIC STUDY OF THE TRANSIENT TRACERS IN THE OCEAN PROGRAM (NAS/TTO) - MEASUREMENTS OF CO₂ TO HIGH ACCURACY IN THE NORTH ATLANTIC (OCE-8022861 A01); 12 MONTHS \$29,110
- ABBOTT, J. L.; SHIPBOARD TECHNICIAN SUPPORT (OCE-8022996 A01); 12 MONTHS \$227,747
- ARMI, LAURENCE D.; TRANSIENT TRACERS IN THE OCEAN: OCEAN MIXING & CIRCULATION (OCE-8023501 A01); 12 MONTHS \$72,185
- GIESKES, JORIS M.; GEOCHEMISTRY OF OCEANIC SEDIMENTS AND IGNEOUS ROCKS: PORE WATER CHEMISTRY (OCE-8023966 A01); 12 MONTHS \$56,888
- TSUCHIYA, MIZUKI; SUBTROPICAL CIRCULATION OF THE NORTH PACIFIC OCEAN (OCE-8024072 A01); 12 MONTHS \$56,000
- SOMERO, GEORGE N.; BIOCHEMICAL AND PHYSIOLOGICAL CHARACTERISTICS OF THE HYDROTHERMAL VENT COMMUNITY ANIMALS (BIOLOGICAL OCEANOGRAPHY) (OCE-8024251 A01); 12 MONTHS \$65,404
- GOLDBERG, EDWARD D. AND CHOW, TSAI-HWA J.; ^{210}Pb / ^{210}Po RATIOS: A GEOCHRONOLOGICAL TOOL FOR MARINE STUDIES (OCE-8024340 A01); 12 MONTHS \$75,900
- KNOX, ROBERT A.; NORTH PACIFIC EXPERIMENT (NORPAX): ANALYSIS OF WIND AND UPPER OCEAN CURRENT MEASUREMENTS FROM THE NORPAX EQUATORIAL SHUTTLE EXPERIMENT (OCE-8024369 A01); 12 MONTHS \$79,000
- SHIPLEY, THOMAS H. AND MOORE, GREGORY F.; HIGH RESOLUTION STUDIES OF SEDIMENT ACCRETION AND SUBDUCTION ALONG THE MIDDLE AMERICA TRENCH (OCE-8024402); 12 MONTHS \$142,768
- SHOR, GEORGE G.; SHIP OPERATIONS SUPPORT (OCE-8024472 A03); 12 MONTHS \$2,000,000
- SHOR, GEORGE G.; SHIP OPERATIONS SUPPORT (OCE-8024472 A04); 8 MONTHS \$2,031,646
- BERGER, WOLFGANG H., VINCENT, EDITH S. AND KILLINGLEY, JOHN S.; DEEP-SEA CARBONATES: ACCUMULATION, DISSOLUTION, AND CARBON DIOXIDE FLUX (OCE-8024610 A01*); 12 MONTHS \$119,054
- HAWKINS, JAMES W.; PETROLOGY AND GEOCHEMISTRY OF ZAMBALS RANGE OPHIOLITE COMPLEX, LUZON, REPUBLIC OF THE PHILIPPINES (SEATAR) (OCE-8024894 A01); 10 MONTHS \$35,239
- SMITH, KENNETH L.; ECOLOGICAL ENERGETIC STUDIES OF A DEEP SEA HYDROTHERMAL VENT COMMUNITY ON THE EAST PACIFIC RISE AT 21 DEGREES NORTH (OCE-8024896 A01*); 12 MONTHS \$43,550
- HESSLER, ROBERT R.; COMMUNITY STRUCTURE AND SMALL SCALE DISTRIBUTION OF BENTHIC MEGAFUNA AT 21 DEGREES N, EAST PACIFIC RISE (OCE-8024901 A01); 12 MONTHS \$55,093
- WEISS, RAY F.; MANOP BOTTOM LANDER PROJECT (OCE-8026727 A01*); 12 MONTHS \$484,283
- PATZERT, WILLIAM C. AND MCNALLY, GERARD J.; NORTH PACIFIC EXPERIMENT (NORPAX): A DRIFTING BUOY STUDY OF THE PACIFIC NORTH EQUATORIAL CURRENT AND COUNTERCURRENT IN 1979 AND 1980 (OCE-8100628 A01); 12 MONTHS \$105,000
- NEALSON, KENNETH H.; STUDIES OF MANGANESE OXIDIZING BACTERIA AND ASSESSMENT OF THEIR ROLE IN MARINE MANGANESE DEPOSITION (OCE-8100641 A01*); 12 MONTHS \$58,295
- SPIESS, FRED N. AND LONSDALE, PETER F.; IDEO MANGANESE NODULE PROGRAM (DEEP TOW SURVEYS) (OCE-8101847 A01*); 12 MONTHS \$83,708
- MEYERS, GARY A.; NORTH PACIFIC EXPERIMENT (NORPAX): SPATIAL SCALES OF INTERANNUAL, ANNUAL AND HIGHER FREQUENCY TEMPERATURE VARIABILITY OBSERVED DURING THE HAWAII-TAHITI SHUTTLE ETC. (OCE-8105039 A01); 12 MONTHS \$61,000
- CURRAY, JOSEPH R. AND MOORE, GREGORY F.; THE SUNDA TRANSECT, PART II: CENTRAL JAVA TRANSECT (OCE-8106597 A01); 11 MONTHS \$51,212
- FILLOUX, JEAN H.; OBSERVATION OF TIDAL AND OTHER PRESSURE FLUCTUATIONS ON THE OPEN OCEAN FLOOR (OCE-8106844 A01); 12 MONTHS \$90,000
- FILLOUX, JEAN H.; OBSERVATION OF TIDAL AND OTHER PRESSURE FLUCTUATIONS ON THE OPEN OCEAN FLOOR (OCE-8106844 A02); \$22,430
- SHOR, GEORGE G., MOORE, GREGORY F. AND CURRAY, JOSEPH R.; THE SUNDA TRANSECT, PART I: CENTRAL SUMATRA TRANSECT (OCE-8108391 A01); 11 MONTHS \$72,645
- ORCUTT, JOHN A. AND MCCLAIN, JAMES S.; EAST PACIFIC RISE STUDY: MARINE SEISMOLOGY (OCE-8108971 A01); 12 MONTHS \$80,200
- TSUCHIYA, MIZUKI; TROPICAL AND SUBTROPICAL CIRCULATION OF THE ATLANTIC OCEAN (OCE-8109273 A01); 12 MONTHS \$61,018
- HEY, RICHARD N. AND SPIESS, FRED N.; GALAPAGOS RIFT SYSTEM: HIGH RESOLUTION STUDY OF PROPAGATING RIFTS (OCE-8109987 A01); 12 MONTHS \$260,445
- COX, CHARLES S.; ACTIVE SOURCE ELECTROMAGNETIC SOUNDING OF THE OCEANIC LITHOSPHERE (OCE-8110399); 12 MONTHS \$126,500
- FILLOUX, JEAN H.; SEAFLOOR MAGNETOTELLURIC EXPLORATION: WESTERN PACIFIC STUDIES (OCE-8111705*); 12 MONTHS \$128,418
- FENICAL, WILLIAM H.; CHEMICAL DEFENSE IN MARINE ORGANISMS (CHE-8111907*); 12 MONTHS \$10,000
- BEERS, JOHN R.; NON-LORICATE OLIGOTRICHOUS CILIATES IN THE PLANKTON: THEIR BIOLOGY, ECOLOGY AND ROLE IN THE FOOD WEB (OCE-8111951); 12 MONTHS \$60,313
- FISHER, FREDERICK H.; ION ASSOCIATION IN SEAWATER (OCE-8115068 A01); 12 MONTHS \$70,598
- REID, JOSEPH L.; A STUDY OF THE CIRCULATION OF THE WORLD OCEAN (OCE-8115858); 12 MONTHS \$111,400
- RIEDEL, WILLIAM R. AND SANFILIPPO, ANNIKA B.; STRATIGRAPHY, TAXONOMY AND PALEOECOLOGY OF CENOZOIC RADIOLARIA (OCE-8117346); 12 MONTHS \$95,000
- THOMAS, WILLIAM H.; MICROCOMPUTING EQUIPMENT FOR PHYTOPLANKTON DATA ANALYSIS (OCE-8117399); 12 MONTHS \$9,629
- LONSDALE, PETER F.; SUBMERSIBLE STUDY OF A GULF OF CALIFORNIA HYDROTHERMAL SYSTEM: GEOLOGY AND HEAT FLOW (OCE-8117557*); 12 MONTHS \$125,000
- SMITH, KENNETH L.; ECOLOGICAL ENERGETICS OF THE DEEP-SEA BENTHIC BOUNDARY LAYER (OCE-8117661); 12 MONTHS \$139,178
- VACQUIER, VICTOR; EQUIPMENT GRANT: LARGE-SCALE RESISTIVITY UNIT FOR DOWNHOLE MEASUREMENTS (OCE-8117693); 12 MONTHS \$37,727
- SALMON, RICHARD L.; HAMILTONIAN METHODS APPLIED TO OCEAN CIRCULATION PROBLEMS (OCE-8117696); 24 MONTHS \$102,307
- CARLUCCI, ANGELO F.; SITES OF MICROBIAL NITRIFICATION IN MARINE ENVIRONMENTS (OCE-8117697); 24 MONTHS \$111,000
- KOBLINSKY, CHESTER J.; DIRECT ESTIMATES OF THE WIND FORCED RESPONSE IN THE WESTERN NORTH ATLANTIC OCEAN (OCE-8117730); 12 MONTHS \$32,371
- GIESKES, JORIS M.; MN-GEOCHEMISTRY IN THE GUAYMAS BASIN (GULF OF CALIFORNIA): HYDROTHERMAL AND DIAGENETIC INFLUENCES (OCE-8117731); 12 MONTHS \$47,768
- WILLIAMS, ROBERT T.; TRITIUM AND CARBONATE CHEMISTRY IN THE TROPICAL NORTH ATLANTIC (OCE-8117844); 4 MONTHS \$81,475
- ABBOTT, J. L.; OCEANOGRAPHIC INSTRUMENTATION (OCE-8118721); 12 MONTHS \$72,565
- SHOR, GEORGE G.; SHIPBOARD SCIENTIFIC SUPPORT EQUIPMENT (OCE-8118722); 12 MONTHS \$63,909
- WEISS, RAY F.; TRACE GASES IN THE OCEAN AND ATMOSPHERE (OCE-8119579*); 12 MONTHS \$64,456
- EPPLEY, RICHARD W.; COORDINATION AND LOGISTICS FOR THE PROPOS PROGRAM: PLANKTONIC RATE PROCESSES IN THE CENTRAL OLIGOTROPHIC OCEANS (OCE-8120773); 18 MONTHS \$320,061
- ROEMMICH, DEAN H.; STUDIES OF LARGE SCALE MERIDIONAL TRANSPORT IN THE OCEAN (OCE-8121262); 12 MONTHS \$75,805
- FAULKNER, D. JOHN; CHEMICAL ECOLOGY OF MARINE ORGANISMS (CHEMISTRY) (CHE-8121471*); 12 MONTHS \$10,000
- RIEDEL, WILLIAM R.; MARINE GEOLOGICAL SAMPLE COLLECTIONS: SCRIPPS INSTITUTION OF OCEANOGRAPHY (OCE-8121512); 12 MONTHS \$41,100
- FISHER, ROBERT L.; PETROLOGIC AND GEOCHEMICAL STUDIES OF IGNEOUS ROCKS FROM THE MARIANA, TONGA AND PHILIPPINE TRENCHES (OCE-8200053); 12 MONTHS \$65,065
- WILLIAMS, PETER M. AND CARLUCCI, ANGELO F.; STUDIES ON SEA-SURFACE FILMS: CHEMISTRY AND MICROBIOLOGY OF FILM FORMATION, COMPOSITION, AND ALTERATION (OCE-8200153*); 12 MONTHS \$100,871
- EPPLEY, RICHARD W.; ACQUISITION OF A 15N EMISSION SPECTROMETER FOR PLANKTON RATE PROCESS MEASUREMENTS IN THE OCEAN (DEB-8207949*); 12 MONTHS \$20,600
- YAYANOS, A. A.; CHARACTERIZATION AND ECOLOGY OF DEEP-SEA BAROPHILIC BACTERIA (OCE-8208419); 12 MONTHS \$126,063
- KEELING, CHARLES D.; ABSOLUTE ABUNDANCE AND VARIABILITY OF DISSOLVED INORGANIC CARBON IN OCEAN WATER (29E-8208475); 12 MONTHS \$48,971
- KOOYMAN, GERALD L. AND WHITE, FRED N.; REHABILITATION OF MARINE ANIMAL RESEARCH POOLS (DEB-8208668*); 12 MONTHS \$40,000
- ROEMMICH, DEAN H.; AN EQUATORIAL CURRENT MONITORING EXPERIMENT AT JARVIS ISLAND (160W) (OCE-8209340); 24 MONTHS \$75,000
- WILLIAMS, ROBERT T.; LARGE VOLUME SAMPLE ACQUISITION AND RADIOCARBON EXTRACTION IN THE TROPICAL ATLANTIC (OCE-8210427); 12 MONTHS \$177,976
- WEISS, RAY F.; TROPICAL ATLANTIC STUDY: CHLOROFLUOROMETHANE MEASUREMENTS (OCE-8212957); 12 MONTHS \$76,607
- UNIVERSITY OF CALIFORNIA, SAN DIEGO
- DELUCA, MARLENE; COMPOUND-SPECIFIC ANALYSIS OF DISSOLVED ORGANIC CARBON IN SEAWATER USING ENZYME SYSTEMS COUPLED TO IMMOBILIZED BACTERIAL LUCIFERASE (OCE-8109938 A01); 12 MONTHS \$37,961
- MILES, JOHN W.; STUDIES IN GEOPHYSICAL FLUID DYNAMICS AND APPLIED MATHEMATICS (OCE-8117539*); 12 MONTHS \$24,500
- MICHEL, ROBERT L.; TRITIUM DISTRIBUTION IN THE NORTHWEST PACIFIC (OCE-8120865); 12 MONTHS \$31,542
- VAN ATTA, CHARLES W. AND HELLAND, KENNETH N.; LABORATORY SIMULATION OF TURBULENT, STRATIFIED SHEAR FLOWS OCCURRING IN THE OCEAN (OCE-8305946); 12 MONTHS \$94,000
- TONT, SARGUN A.; ON THE ANALYSIS AND PREDICTION OF PHYTOPLANKTON POPULATIONS NEAR THE COAST OF SOUTHERN CALIFORNIA (OCE-8307545*); 24 MONTHS \$75,000
- WEARE, JOHN H.; CHEMICAL AND HYDROLOGICAL MODELS OF THE SEAWATER SYSTEM FOR VARIED COMPOSITION, PRESSURE AND TEMPERATURE (OCE-8308482); 12 MONTHS \$65,000
- UNIVERSITY OF CALIFORNIA, SANTA BARBARA
- MACDONALD, KENNETH C.; VEMA TRANSFORM FAULT: STRUCTURE AND TECTONICS (OCE-8018433 A01); 12 MONTHS \$93,519
- CHILDRESS, JAMES J.; STUDIES ON THE METABOLISM OF HYDROTHERMAL VENTS ANIMALS (OCE-8024259 A01); 6 MONTHS \$5,483
- CHILDRESS, JAMES J.; STUDIES ON THE METABOLISM OF HYDROTHERMAL VENTS ANIMALS (BIOLOGICAL OCEANOGRAPHY) (OCE-8024259 A02); 12 MONTHS \$69,116

SCHMITT, RUSSELL J, HOLBROOK, SALLY J, AND EBELING, ALFRED W. MECHANISMS AND CONSEQUENCES OF COMPETITIVE INTERACTIONS BETWEEN TWO TEMPERATE MARINE FISH SPECIES (OCE-8110150); 12 MONTHS \$63,470

CHILDRESS, JAMES J. STUDIES ON THE ECOLOGICAL PHYSIOLOGY OF MIDWATER CRUSTACEANS (OCE-8110154 A01); 12 MONTHS \$92,729

ALLDREDGE, ALICE L, AND ROBISON, BRUCE H. IN SITU STUDIES OF MESOPELAGIC BIOLOGY: MANAGEMENT AND FACILITIES (OCE-8112880 A01*); \$40,000

PREZELIN, BARBARA B. NUTRIENT MODIFIED PHOTOSYNTHESIS AND RELATED GROWTH DYNAMICS IN DINOFAGELLATES (OCE-8117592); 6 MONTHS \$44,239

MILLER, STEPHEN P. 3-D MAGNETIC MODELING OF A PROPAGATING RIFT (OCE-8121972); 18 MONTHS \$36,200

LUPTON, JOHN E, AND TILTON, GEORGE R. MASS SPECTROMETER FACILITY FOR HELIUM-3, TRITIUM, AND RARE GASES (OCE-8203034*); 24 MONTHS \$127,170

EBELING, ALFRED W, AND LAUR, DAVID R. BIOTIC MECHANISMS OF DISTURBANCE-INITIATED TRANSFORMATION OF A SUBTIDAL TEMPERATE REEF COMMUNITY (OCE-8208183); 12 MONTHS \$68,464

PREZELIN, BARBARA B. PHOTONUTRITIVE REGULATION OF DINOFAGELLATE PRIMARY PRODUCTIVITY (OCE-8208187); 12 MONTHS \$65,000

UNIVERSITY OF CALIFORNIA, SANTA CRUZ

SILVER, MARY W. COMMUNITIES ASSOCIATED WITH RAPIDLY SINKING DETRITUS IN THE OCEAN (OCE-8200379); 18 MONTHS \$100,000

UNIVERSITY OF SOUTHERN CALIFORNIA

DOUGLAS, ROBERT G. CENOZOIC PALEOCEANOGRAPHY PROJECT (CENOP) (OCE-7919093 A02); 12 MONTHS \$39,350

TSUJI, FREDERICK I. BIOCHEMICAL STUDIES OF BIOLUMINESCENCE (PCM-7921658 A04*); \$28,105

PIEPER, RICHARD E. STUDIES OF OCEAN VOLUME REVERBERATION AT HIGH ACOUSTIC FREQUENCIES (OCE-7924975 A02); 12 MONTHS \$132,900

GORSLINE, DONN S, DOUGLAS, ROBERT G, AND KU, TEH-LUNG. LATE PLEISTOCENE AND HOLOCENE ENVIRONMENTAL HISTORY OF THE CALIFORNIA CONTINENTAL BORDERLAND (OCE-8020290 A01); 12 MONTHS \$188,025

KEACH, DONALD L, AND VEEK, EUGENE B. SHIP OPERATIONS SUPPORT (OCE-8022117 A01); 12 MONTHS \$497,000

KEACH, DONALD L, AND VEEK, EUGENE B. SHIP OPERATIONS SUPPORT (OCE-8022117 A02); \$90,000

JONES, BURTON H, DUGDALE, RICHARD C, AND MAC ISAAC, JANE J. PHYTOPLANKTON AND NUTRIENT DISTRIBUTIONS IN THREEDIMENSIONAL UPWELLING CENTERS (OCE-8022631 A01); 6 MONTHS \$160,745

KU, TEH-LUNG. STUDIES OF BE-10/BE-9 AND DECAY-SERIES NUCLIDES (OCE-8100662 A01*); 12 MONTHS \$94,615

KREMER, PATRICIA. COMPARATIVE ECOLOGY OF NERITIC CTENOPHORES (OCE-8118237); 12 MONTHS \$63,033

KEACH, DONALD L, NEWMAN, DONALD L, AND VEEK, EUGENE B. OCEANOGRAPHIC INSTRUMENTATION (OCE-8118892); 12 MONTHS \$17,015

KEACH, DONALD L, NEWMAN, DONALD L, AND VEEK, EUGENE B. SHIPBOARD TECHNICIAN SUPPORT (OCE-8118893); 12 MONTHS \$35,000

KEACH, DONALD L, NEWMAN, DONALD L, AND VEEK, EUGENE B. SHIPBOARD SCIENTIFIC SUPPORT EQUIPMENT (OCE-8118894); 12 MONTHS \$77,237

HAMMOND, DOUGLAS E. DIAGENETIC REACTIONS AND TRANSPORT OF CARBON AND SILICA ACROSS THE SEDIMENT-WATER INTERFACE IN THE SOUTHERN CALIFORNIA BORDERLAND (OCE-8209249); 12 MONTHS \$69,817

VEEK, EUGENE B, AND KEACH, DONALD L. BASIC IMPROVEMENTS TO SHIP OPERATION (OCE-8210219); 12 MONTHS \$13,257

COLORADO

COLORADO SCHOOL OF MINES

WARME, JOHN E, AND RINDSBERG, ANDREW E. DOCTORAL DISSERTATION: OCCURRENCE AND SIGNIFICANCE OF TRACE FOSSILS AND OTHER BIOGENIC SEDIMENTARY STRUCTURES IN DEEP SEA DRILLING PROJECT HYDRAULIC PISTON CORES (OCE-8206918); 12 MONTHS \$3,700

CONNECTICUT

UNIVERSITY OF CONNECTICUT-MARINE RESEARCH LABORATORY

WHITLATCH, ROBERT B. IN SITU EXPERIMENTS ON ANIMAL-SEDIMENT RELATIONSHIPS IN THE DEEP SEA (OCE-8117413); 24 MONTHS \$61,774

UNIVERSITY OF CONNECTICUT-MARINE SCIENCES INSTITUTE

FITZGERALD, WILLIAM F. SEA-AIR EXCHANGE PROJECT (SEAREX) - AIR-SEA EXCHANGE OF MERCURY (OCE-8119104 A01); 12 MONTHS \$50,851

WESLEYAN UNIVERSITY

PATTON, PETER C. SEDIMENT TRANSPORT AND DISPERSAL IN THE CONNECTICUT RIVER ESTUARY (EAR-8115905*); 24 MONTHS \$30,000

YALE UNIVERSITY

VERONIS, GEORGE. GENERAL OCEAN CIRCULATION AND GEOPHYSICAL FLUID DYNAMICS (OCE-8109081 A01); 4 MONTHS \$19,524

BERNER, ROBERT A. SULFATE REDUCTION AND PYRITE FORMATION IN ANOXIC MARINE SEDIMENTS (OCE-8109454 A01); 12 MONTHS \$107,000

TUREKIAN, KARL K. SEA-AIR EXCHANGE PROJECT (SEAREX) - 210PB AND 210PO AS ATMOSPHERIC FLUX AND SOURCE INDICATORS (OCE-8113153 A01); 12 MONTHS \$25,893

BUSS, LEO W. A COST-BENEFIT STUDY OF COMPETITION AND AGGREGATION (OCE-8117695); 36 MONTHS \$193,499

BUSS, LEO W. POPULATION BIOLOGY AND EVOLUTION OF CLONAL ORGANISMS: A SYMPOSIUM (OCE-8118729*); 12 MONTHS \$10,987

DELAWARE

UNIVERSITY OF DELAWARE-COLLEGE OF MARINE STUDIES

GARVINE, RICHARD W. THEORETICAL DYNAMICS OF BUOYANT PLUMES IN COASTAL WATERS (OCE-8110889*); 12 MONTHS \$21,886

GARVINE, RICHARD W. FIELD STUDY OF HYDROGRAPHIC AND CURRENT FIELDS OF THE SHELF/SLOPE FRONT (OCE-8110404 A01*); \$38,952

CHURCH, THOMAS M. TRACE METAL CYCLING IN SALT WATER MARSHES (OCE-8201056*); 12 MONTHS \$120,750

UNIVERSITY OF DELAWARE

TRIPP, MARENES R. HISTOPATHOLOGY, HISTOCHEMISTRY AND IMMUNITY AS INDICATORS OF CHEMICAL STRESS (OCE-8016644 A01); 12 MONTHS \$68,872

MOPPER, KENNETH. LOW MOLECULAR WEIGHT CARBONYLS IN SEAWATER: FORMATION VIA PHOTOCHEMICAL PROCESSES AND ROLE IN THE CHEMISTRY OF HUMIC SUBSTANCES (OCE-8207788); 12 MONTHS \$41,521

DISTRICT OF COLUMBIA

NATIONAL ACADEMY OF SCIENCES-NATIONAL RESEARCH COUNCIL

WEBSTER, FERRIS. AN OCEAN CLIMATE RESEARCH STRATEGY (OCE-8212426); 5 MONTHS \$56,000

FLORIDA

FLORIDA ATLANTIC UNIVERSITY

BAKER, EARL W. CHLOROPHYLL GEOCHEMISTRY AND APPLICATIONS IN MARINE GEOLOGY (OCE-8208107*); 12 MONTHS \$51,667

FLORIDA STATE UNIVERSITY

STUART, DAVID W. METEOROLOGICAL AND AIRCRAFT SUPPORT OF ORGANIZATION OF PERSISTENT UPWELLING STRUCTURES (OCE-8021029 A01); 6 MONTHS \$25,715

BURNETT, WILLIAM C. ISOTOPIC AND GEOCHEMICAL STUDIES OF OCEAN-FLOOR PHOSPHORITES (OCE-8117583); 12 MONTHS \$55,926

CLARKE, ALLAN J. THE NONLINEAR GENERATION OF LONG PERIOD TIDES ON CONTINENTAL SHELVES (OCE-8118051); 24 MONTHS \$78,000

O'BRIEN, JAMES J. EQUATORIAL OCEAN-CLIMATE AIR-SEA INTERACTIONS (OCE-8119052); 12 MONTHS \$84,000

FROELICH, PHILIP N, AND ANDREA, MEINRAT O. THE MARINE GEOCHEMISTRY OF GERMANIUM-II (OCE-8200929); 12 MONTHS \$49,868

ANDREA, MEINRAT O. THE GEOCHEMISTRY OF TIN IN THE MARINE ENVIRONMENT (OCE-8200931); 12 MONTHS \$58,245

FROELICH, ALINA S. REPRODUCTION OF CARIBBEAN REEF CORALS (OCE-8208560*); 24 MONTHS \$113,930

NOVA UNIVERSITY-OCEAN SCIENCE CENTER

CHAO, SHENN-YU, AND MCCREARY, JULIAN P. MODELS OF THE INTERACTION OF BAROCLINIC CURRENTS WITH OCEAN BOUNDARIES (OCE-8023790 A01); 24 MONTHS \$89,264

KUNDU, PIJUSH. DYNAMICAL STUDIES OF TURBULENT FLOWS IN THE OCEAN (OCE-8102855 A01); 12 MONTHS \$61,000

BLACKWELDER, PATRICIA L. A WARM CORE RING AS AN ANALOG OF PALEOCLIMATE CHANGE: COCCOLITHOPHORE COMMUNITY STRUCTURE AND CALCIFICATION (OCE-8117653); 24 MONTHS \$94,961

BURNEY, CURTIS M. DIRECT IN-SITU RATES OF MICROBIAL RELEASE AND UPTAKE OF DISSOLVED CARBOHYDRATES (OCE-8120822); 18 MONTHS \$60,000

STATE UNIVERSITY SYSTEM OF FLORIDA-OFFICE-INSTITUTE OF

OCEANOGRAPHY

PURDY, ALAN H. SHIPBOARD SCIENTIFIC SUPPORT EQUIPMENT (OCE-8120059); 12 MONTHS \$30,810

UNIVERSITY OF FLORIDA

BATES, ROGER G. ION ACTIVITIES IN AQUEOUS SYSTEMS, SALINE MEDIA, AND SEAWATER (CHE-8120592*); 12 MONTHS \$7,566

UNIVERSITY OF MIAMI-SCHOOL OF MARINE & ATMOSPHERIC SCIENCES

OSTLUND, H GOTE. NORTH ATLANTIC STUDY OF THE TRANSIENT TRACERS IN THE OCEAN PROGRAM (NAS/TT0): RADIOCARBON AND TRITIUM MEASUREMENTS (29E-7935889 A02); 12 MONTHS \$4,578

OSTLUND, H GOTE. NORTH ATLANTIC STUDY OF THE TRANSIENT TRACERS IN THE OCEAN PROGRAM (NAS/TT0): RADIOCARBON AND TRITIUM MEASUREMENTS (OCE-7935889 A03); \$20,190

KING, KENNETH R. NUTRITIONAL ECOLOGY OF MARINE PLANKTONIC CARNIVORES (OCE-8008355 A02); 12 MONTHS \$91,622

LEAMAN, KEVIN D, OLSON, DONALD B, BROWN, OTIS B, AND EVANS, ROBERT H. PHYSICAL MEASUREMENTS AND ANALYSIS OF WARM CORE RINGS (OCE-8016991 A01*); 12 MONTHS \$241,952

CUHEL, RUSSELL L. MEASUREMENT OF CARBON AND SULFUR METABOLISM IN MARINE PHYTOPLANKTON AND BACTERIA WITH RESPECT TO GROWTH AND NUTRITIONAL STATUS OF NATURAL ASSEMBLAGES (OCE-8018444 A02); 6 MONTHS \$4,982

OLSON, DONALD B. THE ROLE OF RINGS IN THE CIRCULATION OF THE NORTHWESTERN ATLANTIC (OCE-8018736 A01); 12 MONTHS \$68,328

GIBBONS, JAMES. SHIPBOARD TECHNICIAN SUPPORT (OCE-8023976 A02); 12 MONTHS \$161,713

BLECK, RAINER, STUDY OF LONG RANGE TRANSPORT OF AEROSOLS USING EULERIAN AND LAGRANGIAN TECHNIQUES (ATM-8024064*); 12 MONTHS \$25,000

HARRISON, CHRISTOPH G. AND SOUTHAM, JOHN R. THE RELATIONSHIP OF CLIMATE, SEDIMENTATION, AND THE GEOCHEMISTRY OF SEDIMENTS TO GLOBAL TECTONICS (OCE-8024401 A01); 12 MONTHS \$78,748

PETERSON, WILLIAM H. AND OSTLUND, H. GOTE, EQUATORIAL MIXING FROM TRITIUM DATA (OCE-8024904 A02); 12 MONTHS \$85,931

BOUDRA, DOUGLAS B., BLECK, RAINER, AND ROTH, CLAES G. CONTINUED DEVELOPMENT OF A DENSITY COORDINATE MODEL FOR STUDY OF OCEAN CIRCULATION AND HEAT TRANSPORT (OCE-8026010 A01); 12 MONTHS \$95,999

GRUBER, SAMUEL H. AND LUTZ, PETER L. ROLE OF THE LEMON SHARK NEGAPRION BREVIOSTRIS (POEY) IN THE TROPICAL MARINE ENVIRONMENT: A MULTIDISCIPLINARY STUDY (OCE-8110400 A01); 12 MONTHS \$70,831

PROSPERO, JOSEPH M. SEA AIR EXCHANGE PROJECT (SEAREX) - SOIL AEROSOL TRANSPORT TO THE PACIFIC OCEAN (OCE-8112106 A01); 12 MONTHS \$83,536

HONNOREZ, JOSE J. CORRELATIVE STUDY OF THE EFFECTS OF HYDROTHERMAL ALTERATION ON THE UPPER OCEANIC CRUST (OCE-8117698); 18 MONTHS \$90,363

OSTLUND, H. GOTE, TRITIUM IN THE TROPICAL ATLANTIC: TRITIUM MEASUREMENTS (OCE-8117845); 12 MONTHS \$57,286

BEDARD, PHILIP P. DIRECT MEASUREMENTS OF THE CIRCULATION IN THE NORTHEASTERN PACIFIC OCEAN (OCE-8120344); 12 MONTHS \$182,000

MILLERO, FRANK J. STUDY OF IONIC INTERACTIONS IN SEAWATER (OCE-8120659); 12 MONTHS \$85,217

OSTLUND, H. GOTE, OPERATION SWAB - MONITORING OF SHIP CONTAMINATIONS (OCE-8121264); 12 MONTHS \$48,741

GIBBONS, JAMES, OCEANOGRAPHIC INSTRUMENTATION (OCE-8121739); 12 MONTHS \$69,000

GIBBONS, JAMES, SHIPBOARD SCIENTIFIC SUPPORT EQUIPMENT (OCE-8121740); 12 MONTHS \$37,924

LHERMITTE, ROGER M. HIGH RESOLUTION DOPPLER SONAR (OCE-8214018*); 12 MONTHS \$55,099

BROWN, OTIS B. AND GIBBONS, JAMES, SATELLITE COMMUNICATIONS SYSTEM FOR OCEANOGRAPHIC PURPOSES-UNOLS FLEET SYSTEM MANAGEMENT (OCE-8216579); 12 MONTHS \$77,581

UNIVERSITY OF MIAMI

GIBBONS, JAMES, SHIP OPERATIONS SUPPORT (OCE-8022420 A01); 12 MONTHS \$1,684,962

UNIVERSITY OF SOUTH FLORIDA

BELL, SUSAN S. EXPERIMENTAL INVESTIGATIONS ON EPIBENTHIC MEIOBENTHOS IN A SUBTROPICAL HABITAT (OCE-8001726 A01); 24 MONTHS \$85,001

BYRNE, ROBERT H. STUDY OF CHEMICAL COMPLEXATION MODELS: TRACE METALS IN MULTICOMPONENT SOLUTIONS (OCE-8110162 A01); 12 MONTHS \$44,741

GEORGIA

SKIDAWAY INSTITUTE OF OCEANOGRAPHY

LEE, RICHARD F. RESPONSES OF DETOXIFICATION/TOXIFICATION SYSTEMS IN MARINE INVERTEBRATES TO ORGANIC POLLUTION (OCE-8017692 A01); 12 MONTHS \$116,290

MENZEL, DAVID W. MARINE TECHNICIAN SUPPORT (OCE-8021108 A01); 12 MONTHS \$25,000

MENZEL, DAVID W. SHIP OPERATIONS SUPPORT (OCE-8021111 A01); 12 MONTHS \$80,000

TENORE, KENNETH R. EQUIPMENT PROPOSAL FOR LIQUID SCINTILLATION COUNTER (OCE-8117629*); 12 MONTHS \$14,500

PAFFENHOFER, GUSTAV A. THE RESPONSE OF MARINE PLANKTONIC COPEPODS TO FOOD SIZE, QUANTITY AND QUALITY (OCE-8117781); 12 MONTHS \$91,465

MENZEL, DAVID W. SHIPBOARD SCIENTIFIC SUPPORT EQUIPMENT (OCE-8118219); 12 MONTHS \$8,100

TENORE, KENNETH R. FOOD CHAIN DYNAMICS OF DETRITAL FEEDING BENTHOS (OCE-8200385); 24 MONTHS \$145,050

UNIVERSITY OF GEORGIA

DARLEY, W. DOCTORAL DISSERTATION RESEARCH IN INFLUENCE OF NUTRIENT CYCLES ON THE TIMING OF CELL DIVISION IN AN ESTUARINE DIATOM (OCE-8109924); 24 MONTHS \$6,593

HOUSON, ROBERT E. MICROBIAL DEGRADATION OF DETRITAL LIGNOCCELLULOSES IN MARINE ENVIRONMENTS (OCE-8117834*); 12 MONTHS \$47,471

LEDBETTER, MICHAEL T. GEOLOGIC EVIDENCE OF THE WESTERN BOUNDARY UNDERCURRENT (OCE-8117887); 18 MONTHS \$37,335

HAWAII

OCEANIC INSTITUTE

BIENFANG, PAUL K. PHYTOPLANKTON SINKING: FIELD AND LABORATORY ANALYSIS OF BIOGENIC TRANSPORT RATES (OCE-8100679 A01*); 12 MONTHS \$155,717

UNIVERSITY OF HAWAII-MANOA

WYRTKI, KLAUS, MONITORING PACIFIC SEA LEVEL FLUCTUATIONS (29E-7921789 A02); 12 MONTHS \$140,000

MOORE, DENNIS W. THE RESPONSE OF THE EQUATORIAL OCEAN TO VARIABLE SURFACE STRESSES, AND EQUATORIAL THEORETICAL PANEL (OCE-7921831 A02); 12 MONTHS \$34,000

MOORE, DENNIS W. AND FIRING, ERIC, LINE ISLAND PROFILING (OCE-7923363 A03*); 12 MONTHS \$463,786

KINZIE, ROBERT A. RESPONSE OF CORALS TO HABITAT RELATED DIFFERENCES IN LIGHT INTENSITY AND SPECTRAL DISTRIBUTION (OCE-8018652 A01); 12 MONTHS \$77,378

KROOPNICK, PETER M. AND MARGOLIS, STANLEY V. GEOCHEMICAL AND ISOTOPIC STUDIES OF MARINE PLANKTON AND SEDIMENTS ACROSS THE EQUATORIAL PACIFIC UPWELLING ZONE (OCE-8019459 A01*); 12 MONTHS \$73,300

HELSLEY, CHARLES E. SHIPBOARD TECHNICIAN SUPPORT (OCE-8023025 A01); 12 MONTHS \$21,800

KARL, DAVID M. ECOLOGY OF MICROORGANISMS: NUCLEOTIDE FINGERPRINTING OF DEEP SEA HYDROTHERMAL VENT MICROBIAL COMMUNITIES (OCE-8024255 A01); 12 MONTHS \$21,696

BROCHER, THOMAS M. MULTICHANNEL SEISMIC STUDY OF THE HAWAIIAN RIDGE: DEEP STRUCTURE (OCE-8117210*); 12 MONTHS \$172,533

BROCHER, THOMAS M. MULTICHANNEL SEISMIC STUDY OF THE HAWAIIAN RIDGE: DEEP STRUCTURE (OCE-8117210 A01); \$16,100

SANSONE, FRANCIS J. ADSORPTION AND BIOAVAILABILITY OF SHORT-CHAIN ORGANICS IN MARINE SEDIMENTS (OCE-8117582); 12 MONTHS \$44,051

THEYER, FRITZ, RADIOLARIAN DATUM PLANES AND MAGNETIC REVERSALS IN TERTIARY SEDIMENTS (OCE-8117997); 18 MONTHS \$130,000

HELSLEY, CHARLES E. ADAPTION, INSTALLATION AND TESTING OF THE SEAMARC II SEAFLOOR ACOUSTIC IMAGING AND BATHYMETRIC MAPPING SYSTEM (OCE-8118891*); 12 MONTHS \$201,315

HELSLEY, CHARLES E. AND CAMPBELL, J. FRISBEE, OCEANOGRAPHIC INSTRUMENTATION (OCE-8119067); 12 MONTHS \$50,000

HELSLEY, CHARLES E. AND CAMPBELL, J. FRISBEE, SHIPBOARD SCIENTIFIC SUPPORT EQUIPMENT (OCE-8119068); 12 MONTHS \$88,500

LAWS, EDWARD A. ESTIMATION OF PHYTOPLANKTON C/N RATIOS AND RELATIVE GROWTH RATES BASED ON PROTEIN AND TOTAL CARBON SYNTHESIS, A COMPONENT OF THE PROPOS PROJECT (OCE-8120180); 18 MONTHS \$55,970

THEYER, FRITZ, MARINE GEOLOGICAL SAMPLE COLLECTIONS: UNIVERSITY OF HAWAII (OCE-8201962); 12 MONTHS \$21,300

HIROTA, JED. LATITUDINAL PATTERNS IN FORAGING STRATEGIES OF EUCHAETA, A CARNIVOROUS MARINE COPEPOD (OCE-8207406); 24 MONTHS \$74,306

YOUNG, RICHARD E. ASPECTS OF THE ECOLOGY OF OCEANIC CEPHALOPODS: CONCEALMENT STRATEGIES AND THE EFFECT OF VISUAL PREDATORS ON VERTICAL DISTRIBUTION PATTERNS (OCE-8207754); 12 MONTHS \$55,000

FIRING, ERIC, NORTH PACIFIC EXPERIMENT (NORPAX): ANALYSIS OF LOWFREQUENCY EQUATORIAL DYNAMICS DURING THE NORPAX TAHITI SHUTTLE EXPERIMENT (OCE-8208944*); 12 MONTHS \$78,684

HELSLEY, CHARLES E. AND LONGFIELD, RICHARD L. SHIP OPERATIONS SUPPORT (OCE-8214812); 6 MONTHS \$51,003

HELSLEY, CHARLES E. AND CAMPBELL, J. FRISBEE, SHIP OPERATIONS SUPPORT (OCE-8214812 A01); \$15,000

ILLINOIS

UNIVERSITY OF CHICAGO

ALLER, ROBERT C. THE EFFECTS OF ANIMAL-SEDIMENT INTERACTIONS ON GEOCHEMICAL PROCESSES NEAR THE SEDIMENT-WATER INTERFACE (OCE-8111415 A01*); 12 MONTHS \$71,281

LOUISIANA

LOUISIANA STATE UNIVERSITY, BATON ROUGE

CHIAN, LUI-HEUNG, THE DISTRIBUTION OF BARIUM AND THE RADIUM-BARIUM RELATIONSHIP IN THE NORTHEAST ATLANTIC OCEAN (OCE-8110409 A01); 12 MONTHS \$30,156

LOUISIANA UNIVS MARINE CONSORTIUM - LUMCON

DAGG, MICHAEL J. FEEDING RESPONSES OF MARINE COPEPODS TO PATCHY FOOD ENVIRONMENTS (OCE-8119848); 24 MONTHS \$89,978

MAINE

BIGELOW LABORATORY FOR OCEAN SCIENCES

GLOVER, HILARY E. AN ENZYMATIC APPROACH TO MEASURE CHEMOAUTOTROPHIC CO₂ ASSIMILATION IN MARINE BACTERIA (OCE-7925407 A01); 5 MONTHS \$11,245

GLOVER, HILARY E. AN ENZYMATIC APPROACH TO MEASURE CHEMOAUTOTROPHIC CO₂ ASSIMILATION IN MARINE BACTERIA (OCE-7925407 A02); 24 MONTHS \$106,503

KING, FREDERICK D. REGULATION OF NITROGEN EXCRETION IN MARINE ZOOPLANKTON (OCE-8009540 A01); 12 MONTHS \$46,786

GUILLARD, ROBERT R. ESTABLISHMENT OF A CULTURE COLLECTION OF MARINE PHYTOPLANKTON (OCE-8117895); 12 MONTHS \$108,116

WILLIAMS, PETER J. IN VITRO AND IN SITU MEASUREMENTS OF NET AND GROSS OXYGEN PRODUCTION IN OLIGOTROPHIC OCEANS (OCE-8121269); 18 MONTHS \$75,000

VENTSCH, CLARICE M. PROPOS: FLUORESCENCE SPECTRAL SIGNATURES OF INDIVIDUAL CELLS: CHARACTERIZATION OF SUBPOPULATIONS OF MICROBES (OCE-8121331); 24 MONTHS \$50,489

GARSIDE, CHRISTOPH. SOME ASPECTS OF THE DYNAMICS OF THE PHOTIC ZONE NITRATE POOL IN OLIGOTROPHIC WATERS (OCE-8200488); 6 MONTHS \$14,983

GUILLARD, ROBERT R. AND MURPHY, LYNDA S. COMPARATIVE ENVIRONMENTAL PHYSIOLOGY OF MARINE PHYTOPLANKTON: RESPONSES TO OLIGOTROPHIC WATERS (OCE-8200626); 12 MONTHS \$180,000

YENTSCH, CLARICE M; FLOW CYTOMETRY DEVELOPMENT FOR OCEAN SCIENCE RESEARCH (OCE-8213567); 12 MONTHS \$125,000
UNIVERSITY OF MAINE, ORONO

MCCLEAVE, JAMES D; SPAWNING AND LARVAL DRIFT OF AMERICAN AND EUROPEAN EELS (*ANGUILLA ROSTRATA* AND *A. ANGUILLA*) RELATIVE TO FRONTS AND CIRCULATION IN THE SOUTHERN SARGASSO SEA (OCE-8208394); 12 MONTHS \$35,845

MARYLAND

JOHNS HOPKINS UNIVERSITY-CHESAPEAKE BAY INSTITUTE

TAYLOR, W. R. AND SHEEHAN, R. K; SHIP OPERATIONS SUPPORT (OCE-8024271 A01); 12 MONTHS \$519,632

JOHNS HOPKINS UNIVERSITY

JACKSON, JEREMY B; DOCTORAL DISSERTATION RESEARCH: THE DETERMINANTS OF THE OUTCOMES OF COMPETITIVE ENCOUNTERS IN DENSELY POPULATED INFANAL ASSEMBLAGES (OCE-8110928); 12 MONTHS \$4,978

JACKSON, JEREMY B; ECOLOGY OF CARIBBEAN CRYPTIC CORAL REEF COMMUNITIES (OCE-8117632); 12 MONTHS \$93,012

SELIGER, HOWARD H; PHOTOCOCYTOLOGY OF NATURAL PHYTOPLANKTON POPULATIONS (OCE-8208745); 12 MONTHS \$84,424

NATIONAL OCEANIC ATMOSPHERIC ADMINISTRATION

FLEMING, REX J; ARGOS DATA COLLECTION AND LOCATION SURVEY (OCE-8108974 A01); 12 MONTHS \$13,500

BELSKY, MARTIN H; REVIEW AND PLANNING OF OCEAN/CLIMATE RESEARCH AND MONITORING STRATEGIES (OCE-8121014); 12 MONTHS \$50,000

UNIVERSITY OF MARYLAND, COLLEGE PARK-CENTER FOR ENVIRONMENTAL & ESTUARINE STUDIES

FISHER, THOMAS R; REGENERATION OF NITROGEN NUTRIENTS IN THE WATER COLUMNS OF THE CHESAPEAKE AND DELAWARE BAYS (OCE-8112127 A01); \$4,916

UNIVERSITY OF MARYLAND, COLLEGE PARK-CHESAPEAKE BIOLOGICAL LAB

HOUE, EDWARD D; ECOLOGY OF MARINE FISH LARVAE INTERACTIONS AMONG LARVAE, THEIR PREDATORS AND THEIR PREY (OCE-8108021 A01); \$6,056

ROMAN, MICHAEL R; IN SITU GRAZING OF MICROZOOPLANKTON IN WARM CORE GULF STREAM RINGS (OCE-8117562 A01); 12 MONTHS \$89,430

TUTTLE, JON H; MICROBIAL SULFUR CYCLING IN ESTUARIES (OCE-8208032); 12 MONTHS \$60,006

UNIVERSITY OF MARYLAND, COLLEGE PARK

VERMELI, GEORAT J; STUDIES ON THE PREDATION ON RECENT AND FOSSIL MOLLUSCS (OCE-7909079 A02); 12 MONTHS \$49,424

MASSACHUSETTS

BATTELLE MEMORIAL INSTITUTE-BATTELLE WILLIAM F CLAPP LABORATORIES INC

NEFF, JERRY M; DEVELOPMENT OF DIAGNOSTIC BIOCHEMICAL INDICES OF EARLY POLLUTANT STRESS IN MARINE ANIMALS (OCE-8111949 A01); 12 MONTHS \$116,455

GORDON COLLEGE

WRIGHT, RICHARD T; BACTERIAL NUMBERS AND ACTIVITY IN ESTUARINE AND COASTAL ENVIRONMENTS (OCE-7925368 A02); 12 MONTHS \$48,560

HARVARD UNIVERSITY

ROBINSON, ALLAN R; EDDY CURRENTS AND THE LIFE CYCLE OF REEF FISHES (OCE-8009554 A02); 24 MONTHS \$139,829

MCCARTHY, JAMES J; NITROGENOUS AND PHOSPHORUS NUTRITION OF PHYTOPLANKTON IN WARM CORE RINGS (OCE-8022990 A02); 12 MONTHS \$113,326

SEBENS, KENNETH P. AND OLSON, R RANDOLF; GROWTH RATE, COMPETITION FOR SPACE, AND SUN-SHADE ADAPTATION OF A COLONIAL ASCIDIAN WITH PROCAROTIC SYMBIONTS (OCE-8114299); 24 MONTHS \$6,341

ROBINSON, ALLAN R; JOINT U.S.-U.S.S.R. MID-OCEAN DYNAMICS EXPERIMENT (POLYMODE): PROJECT COMPLETION (OCE-8200333); 18 MONTHS \$38,300

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

HART, STANLEY R; CHEMISTRY OF THE OCEANIC CRUST: DURATION AND FLUXES OF CRUST-SEA WATER INTERACTIONS (OCE-7909457 A01); 24 MONTHS \$90,935

SCLATER, JOHN G; CENOZOIC PALEOCEANOGRAPHY PROJECT (CENOP) (OCE-7917016 A02); 12 MONTHS \$20,090

HARRISON, D E; TROPICAL WIND STRESS ANALYSIS (OCE-7921815 A02); 12 MONTHS \$27,000

CANE, MARK A; SEASONAL VARIABILITY OF EQUATORIAL OCEAN CIRCULATIONS (OCE-7922046 A02); 12 MONTHS \$73,185

WUNSCH, CARL; STUDIES OF OCEAN VARIABILITY BY ACOUSTIC METHODS (OCE-8017791 A01); 12 MONTHS \$187,390

WUNSCH, CARL; STUDIES OF THE GENERAL CIRCULATION OF THE OCEAN (OCE-8018514 A02); 12 MONTHS \$122,857

BOYLE, EDWARD A; THE MICRO-TRACE ELEMENT COMPOSITION OF FORAMINIFERA TESTS (OCE-8018665 A01); 12 MONTHS \$78,525

FLIERL, GLENN R; THEORETICAL STUDIES OF THE PHYSICS AND BIOLOGY OF WARM CORE RINGS (OCE-8019260 A01); 12 MONTHS \$160,790

EDMOND, JOHN M; EAST PACIFIC RISE STUDY: GEOCHEMISTRY OF HYDROTHERMAL WATERS (OCE-8020203 A01); 12 MONTHS \$234,606

SCLATER, JOHN G; HEAT FLOW AND TECTONICS OF THE WESTERN MEDITERRANEAN AND SOUTHERN EUROPE (OCE-8024287 A01); 12 MONTHS \$61,716

WUNSCH, CARL, AND ERIKSEN, CHARLES C; STUDIES OF THE DYNAMICS OF THE EQUATORIAL PACIFIC OCEAN (OCE-8024911 A02); 12 MONTHS \$287,000

EDMOND, JOHN M; MEASUREMENTS OF DISSOLVED TRACE METALS AND OTHER SPECIES IN THE WATER COLUMN OVER BOTTOM LANDER SITES (OCE-8103161 A01); 12 MONTHS \$35,080

GROVE, TIMOTHY L; THE ROLE OF CLINOPYROXENE IN THE PETROGENESIS OF OCEAN FLOOR BASALTS (OCE-8110387); 24 MONTHS \$58,230

FREY, FREDERICK A; CHARACTERIZATION OF OCEANIC MANTLE MINERALOGY AND THE MELTING PROCESSES CREATING BASALTS (OCE-8117578); 21 MONTHS \$69,755

BOYLE, EDWARD A; THE PARTITIONING OF CU, NI, CD, ZN, FE, BA AND PB BETWEEN SOLUTION AND SOLID PHASE IN THE MISSISSIPPI PLUME (OCE-8117929); 12 MONTHS \$35,000

MOREL, FRANCOIS M; IRON UPTAKE AND NUTRITION IN MARINE PHYTOPLANKTON (OCE-8118103); 12 MONTHS \$81,200

RIZZOLI, PAOLA; FORCING OF COHERENT STRUCTURES AND THEIR ENERGETICS AND PREDICTABILITY (OCE-8118473); 12 MONTHS \$41,500

CHISHOLM, SALLIE W; THE ROLE OF CELL CYCLES IN THE PHYSIOLOGICAL ECOLOGY OF PHYTOPLANKTON (OCE-8118475); 12 MONTHS \$88,400

EDMOND, JOHN M; COOPERATIVE STUDY OF HOT SPRINGS IN THE GUAYMAS BASIN - GULF OF CALIFORNIA (OCE-8118481); 12 MONTHS \$64,185

CHISHOLM, SALLIE W; SPECIFIC GROWTH RATES OF PHYTOPLANKTON IN OLIGOTROPHIC OCEANS (OCE-8121270); 24 MONTHS \$50,000

MELVILLE, W KENDALL; WAVE SHEAR-FLOW INTERACTION (OCE-8240404); 12 MONTHS \$42,665

TUFTS UNIVERSITY

PECHENIK, JAN A; CHARACTERIZING DELAY OF METAMORPHOSIS BY GASTROPOD LARVAE (OCE-8121643); 24 MONTHS \$30,916

UNIVERSITY OF MASSACHUSETTS, BOSTON

WALLACE, GORDON T; PROCESSES AFFECTING THE HORIZONTAL AND VERTICAL DISTRIBUTION OF TRACE ELEMENTS IN THE GULF STREAM AND BLAKE PLATEAU (OCE-8244355); 12 MONTHS \$70,224

WOODS HOLE OCEANOGRAPHIC INSTITUTION

MCCARTNEY, MICHAEL S; INTERNATIONAL SOUTHERN OCEAN STUDIES (ISOS): ANTARCTIC INTERMEDIATE WATER RENEWAL AND CIRCULATION (OCE-7822223 A03); 12 MONTHS \$200,000

LOHMANN, GEORGE P; CENOZOIC PALEOCEANOGRAPHY PROJECT (CENOP) (OCE-7918286 A03); 12 MONTHS \$76,990

JANNASCH, HOLGER W; MICROBIAL TRANSFORMATIONS IN SEA WATER (OCE-7919178 A02); 6 MONTHS \$19,000

LUTTEN, JAMES R, STOMMEL, HENRY M, VOORHIS, ARTHUR D, AND WEBB, DOUGLAS C; LARGE SCALE ZONAL STRUCTURE OF EQUATORIAL CURRENTS IN THE TROPICAL PACIFIC (OCE-7921786 A02); 12 MONTHS \$389,000

RHINES, PETER B. AND BRUCE, J. G; ZONAL VARIABILITY IN THE EQUATORIAL ATLANTIC (OCE-7925350 A02); 12 MONTHS \$81,000

BRADSHAW, ALVIN L; NORTH ATLANTIC STUDY OF THE TRANSIENT TRACERS IN THE OCEAN PROGRAM (NAS/TTO): ALKALINITY AND TOTAL CARBON DIOXIDE MEASUREMENTS (OCE-8008160 A03); 12 MONTHS \$162,833

GRANT, WILLIAM D. AND WILLIAMS, ALBERT J; COASTAL OCEAN DYNAMICS EXPERIMENT (CODE): BOTTOM BOUNDARY SHEAR STRESS (OCE-8014938 A02); 12 MONTHS \$179,000

BEARDSLEY, ROBERT C; COASTAL OCEAN DYNAMICS EXPERIMENT (CODE): OCEAN CURRENT AND WIND MEASUREMENTS (OCE-8014941 A02); 12 MONTHS \$691,000

STOMMEL, HENRY M; RESEARCH IN OCEAN PHYSICS (OCE-8015789 A01); 12 MONTHS \$203,782

JOYCE, TERRENCE M; PHYSICAL STUDIES OF WARM CORE GULF STREAM RINGS (OCE-8016983 A02); 12 MONTHS \$424,911

WIEBE, PETER H; ECOLOGICAL STUDIES OF ZOOPLANKTON POPULATIONS IN WARM CORE RINGS AND IN THE NORTHWESTERN ATLANTIC SLOPE WATER (OCE-8017248 A01); 12 MONTHS \$476,721

BACKUS, RICHARD H; MESOPELAGIC FISHES IN GULF STREAM WARM CORE RINGS (OCE-8017270 A01); 12 MONTHS \$138,510

COWLES, TIMOTHY J; ZOOPLANKTON RATE PROCESSES AND COPEPOD DISTRIBUTION PATTERNS AS AFFECTED BY GULF STREAM WARM CORE RINGS (OCE-8017271 A01); 12 MONTHS \$85,306

SPINDEL, ROBERT C; OCEAN ACOUSTIC TOMOGRAPHY (OCE-8017309 A01); 12 MONTHS \$144,429

GAGOSIAN, ROBERT B; THE BIOGENIC ORGANIC COMPOUND COMPOSITION AND FLUX OF OCEANIC PARTICLES (OCE-8018436 A01); 12 MONTHS \$117,918

STEGEMAN, JOHN J; POLLUTANT RESPONSES IN MARINE ANIMALS: CYTOCHROME P-450 AND BIOTRANSFORMATION OF HYDROCARBONS IN MARINE FISH (OCE-8018569 A01); 12 MONTHS \$120,394

CAREY, FRANCIS G; ACTIVITY PATTERNS OF PELAGIC FISH (OCE-8018674 A01); 12 MONTHS \$45,842

SAYLES, FREDERICK L; ADVECTION OF SEA WATER THROUGH OCEANIC CRUST AND SEDIMENTS: LOW TEMPERATURE CHEMICAL INTERACTIONS AND GEOCHEMICAL SIGNIFICANCE (OCE-8019023 A01); 12 MONTHS \$98,400

BERGGREN, WILLIAM A; EVOLUTIONARY PATTERNS IN CENOZOIC PLANKTONIC FORAMINIFERA (OCE-8019052 A01); 12 MONTHS \$150,225

- MOTTL, MICHAEL J. GEOCHEMISTRY OF MARINE SEDIMENTS, VOLCANIC ROCKS, AND PORE WATERS: IPOD COSTA RICA RIFT SITES (OCE-8019056 A01); 12 MONTHS \$53,227
- WATSON, STANLEY W. AND WATERBURY, JOHN B. CONCENTRATION, DISTRIBUTION AND ROLE OF SYNECHOCOCCLUS IN THE OCEAN (OCE-8019057 A01); 10 MONTHS \$125,015
- HUNT, JOHN M. GEOCHEMISTRY OF VOLATILE ORGANIC COMPOUNDS IN MARINE SEDIMENTS (OCE-8019508 A01); 12 MONTHS \$119,215
- BALLARD, ROBERT D. VOLCANIC AND TECTONIC STUDIES OF THE EAST PACIFIC RISE (OCE-8020425 A03); 12 MONTHS \$90,000
- BRINK, KENNETH H. ORGANIZATION OF PERSISTENT UPWELLING STRUCTURES: NEARSURFACE CIRCULATION ASSOCIATED WITH A COASTAL UPWELLING CENTER (OCE-8021028 A01); 6 MONTHS \$53,476
- MAXWELL, ARTHUR E. AND DONNELLY, JOHN D. OPERATIONS SUPPORT FOR DEEP SUBMERGENCE RESEARCH VEHICLE (DSRV) ALVIN PROGRAM (29E-8021920 A02); \$800
- DONNELLY, JOHN D. AND GRICE, GEORGE D. OPERATIONS SUPPORT FOR DEEP SUBMERGENCE VEHICLE (DSV) ALVIN PROGRAM (OCE-8021920 A03); 12 MONTHS \$1,311,000
- DINSMORE, ROBERTSON P. SHIP OPERATIONS SUPPORT (OCE-8022421 A04); 12 MONTHS \$1,932,490
- DINSMORE, ROBERTSON P. SHIP OPERATIONS SUPPORT (OCE-8022421 A04); 8 MONTHS \$1,932,490
- BACON, MICHAEL P. MARINE GEOCHEMISTRY OF THE RADIOACTIVE ELEMENTS (OCE-8024063 A01); 12 MONTHS \$96,905
- DEUSER, WERNER G. SEASONAL CHANGES IN THE SUPPLY OF SEDIMENT TO THE DEEP SARGASSO SEA (OCE-8024130 A01*); 12 MONTHS \$103,555
- JANNASCH, HOLGER W. MICROBIOLOGICAL STUDIES AT DEEP SEA HYDROTHERMAL VENTS (OCE-8024253 A01); 12 MONTHS \$66,737
- GAGOSIAN, ROBERT B. ORGANIC GEOCHEMICAL STUDIES OF THE EAST PACIFIC RISE HYDROTHERMAL VENTS (OCE-8024256 A01); 18 MONTHS \$60,468
- LEE, CINDY. THE ROLE OF ORGANIC NITROGEN COMPOUNDS IN DECOMPOSITION PROCESSES (OCE-8024282 A01); 12 MONTHS \$52,700
- MARCUS, NANCY H. SEASONALITY, DIAPAUSE, AND THE EVOLUTION OF MARINE COPEPODS (OCE-8024440 A01); 12 MONTHS \$71,643
- MADIN, LAURENCE P. THE BIOLOGY OF GELATINOUS ZOOPLANKTON: FEEDING RATES AND BEHAVIOR OF SALPS, CTENOPHORES AND HYPERID AMPHIPODS (OCE-8024441 A01); 12 MONTHS \$79,684
- MADIN, LAURENCE P. THE BIOLOGY OF GELATINOUS ZOOPLANKTON: FEEDING RATES AND BEHAVIOR OF SALPS, CTENOPHORES AND HYPERID AMPHIPODS (OCE-8024441 A02); \$3,000
- GOLDMAN, JOEL C. THE INFLUENCE OF TEMPERATURE ON PHOTOSYNTHETIC AND NITROGEN TURNOVER RATES OF MARINE PHYTOPLANKTON (OCE-8024445 A01); 12 MONTHS \$92,761
- SAYLES, FREDERICK L. SEA WATER SEDIMENT INTERACTION: THE DIFFUSIVE FLUXES OF IONS BETWEEN THE OCEANS AND THE UNDERLYING SEDIMENTS (OCE-8024447 A01); 12 MONTHS \$118,179
- VON HERZEN, RICHARD P. HEAT FLOW AND TECTONICS OF THE WESTERN MEDITERRANEAN: SUBSIDENCE MODELS (OCE-8025181 A01); 12 MONTHS \$48,950
- SANDERS, HOWARD L. THE BENTHIC MACROFAUNA OF THE EAST PACIFIC RISE HYDROTHERMAL VENT REGION AT 21 DEGREES NORTH (OCE-8025201 A01); 12 MONTHS \$57,894
- PURDY, G. MICHAEL. SEISMIC INVESTIGATIONS OF THE KANE FRAC-TURE ZONE AND THE ADJACENT OCEANIC CRUST (OCE-8025206 A01); 12 MONTHS \$241,416
- JOHNSON, DAVID A. LATE CENOZOIC SEDIMENTATION AND PALEO-OCEANOGRAPHY OF THE RIO GRANDE RISE VEMA CHANNEL (OCE-8025208 A01); 12 MONTHS \$120,000
- WATERBURY, JOHN B. NITROGEN FIXATION IN THE MARINE ENVIRONMENT BY AEROBIC CHEMOHETEROTROPHIC BACTERIA (OCE-8025241 A01); 12 MONTHS \$64,134
- PEAL, KENNETH R. SHIPBOARD TECHNICIAN SUPPORT (OCE-8101806 A01); 12 MONTHS \$199,900
- RICHARDSON, PHILIP L. OWENS, W. B. AND PRICE, JAMES F. LONG-TERM LAGRANGIAN MEASUREMENTS OF INTERMEDIATE AND DEEP FLOWS IN THE NORTHWESTERN NORTH ATLANTIC OCEAN (OCE-8109145); 12 MONTHS \$276,200
- HULBURT, EDWARD M. THE CONFORMITY OF THE PHYTOPLANKTON OF CASCO BAY, MAINE, TO THE CHEMOSTAT EQUATIONS (OCE-8109263); 12 MONTHS \$20,000
- ZAFIRIOU, OLIVER C. CHEMICAL EFFECTS OF LIGHT IN THE SEA (OCE-8110160 A01); 6 MONTHS \$59,010
- CURRY, WILLIAM B. PLANKTONIC FORAMINIFERAL FLUXES: ISOTO-PIC AND FAUNAL STUDIES (OCE-8110161); 24 MONTHS \$61,014
- BRYAN, WILFRED B. THE ROLE OF CLINOPYROXENE IN THE PETRO-GENESIS OF OCEAN FLOOR BASALTS (OCE-8110932); 24 MONTHS \$82,211
- GAGOSIAN, ROBERT B. SEA-AIR EXCHANGE PROJECT (SEAREX) - SOURCES AND FLUXES OF ORGANIC COMPOUNDS IN THE MARINE ATMOSPHERE (OCE-8111947 A01); 12 MONTHS \$243,737
- GRASSLE, J. F. BENTHIC ECOLOGY OF SOFT SEDIMENTS ASSOCIATED WITH HYDROTHERMAL VENTS (OCE-8115251); 12 MONTHS \$70,714
- WARREN, BRUCE A. ANALYSIS OF DEEP WESTERN BOUNDARY CUR-RENTS (OCE-8116520); 12 MONTHS \$53,000
- DEUSER, WERNER G. STABLE ISOTOPE GEOCHEMISTRY OF SEASON-ALLY TRAPPED PLANKTONIC FORAMINIFERA (OCE-8117002*); 12 MONTHS \$66,552
- OWENS, W. B. AND PRICE, JAMES F. AN INVESTIGATION OF EDDY IN-DUCED DIFFUSION IN THE NORTHWESTERN SEGMENT OF THE SUB-TROPICAL GYRE OF THE NORTH ATLANTIC OCEAN (OCE-8117467); 12 MONTHS \$310,000
- JANNASCH, HOLGER W. MICROBIAL TRANSFORMATIONS IN THE DEEP SEA (OCE-8117560); 12 MONTHS \$120,000
- STEPHEN, R. A. BOREHOLE SEISMIC EXPERIMENT IN THE COSTA RICA RIFT AREA (OCE-8117571); 12 MONTHS \$171,401
- GRASSLE, J. F. IN SITU EXPERIMENTS ON ANIMAL-SEDIMENT RELA-TIONSHIPS IN THE DEEP SEA (OCE-8117586); 12 MONTHS \$88,585
- KEIGWIN, LLOYD D. OCEANOGRAPHIC EFFECTS OF CLOSING THE PANAMA ISTHMUS (OCE-8117590); 24 MONTHS \$114,839
- VON HERZEN, RICHARD P. CORRELATION OF DEPTH, GEOID, AND HEAT FLOW ANOMALIES ON THE BERMUDA RISE LITHOSPHERIC COOLING MODELS (OCE-8117886); 12 MONTHS \$44,073
- JENKINS, WILLIAM J. NORTH ATLANTIC TRANSPORT STUDY USING TRITIUM AND JHE (OCE-8117998*); 12 MONTHS \$256,000
- UCHUPI, ELAZAR, TUCHOLKE, BRIAN E. AND HOLLISTER, CHARLES D. CONSTRUCTION OF THE NOVA SCOTIAN CONTINENTAL RISE (OCE-8118014); 12 MONTHS \$15,842
- FARRINGTON, JOHN W. AND GAGOSIAN, ROBERT B. ACQUISITION OF A FINNIGAN 4505 GAS CHROMATOGRAPH-MASS SPECTROMETER (OCE-8118049); 12 MONTHS \$134,040
- DINSMORE, ROBERTSON P. OCEANOGRAPHIC INSTRUMENTATION (OCE-8118565); 12 MONTHS \$69,937
- DINSMORE, ROBERTSON P. OCEANOGRAPHIC INSTRUMENTATION (OCE-8118565 A01); \$156,639
- DINSMORE, ROBERTSON P. SHIPBOARD SCIENTIFIC SUPPORT EQUIP-MENT (OCE-8118821); 12 MONTHS \$73,690
- GRASSLE, J. FREDERICK. DOCTORAL DISSERTATION RESEARCH: LARVAL SETTLEMENT OF SOFT-BOTTOM BENTHIC INVERTEBRATES: PASSIVE DEPOSITION OR ACTIVE HABITAT SELECTION (OCE-8119865); 24 MONTHS \$7,565
- MADIN, LAURENCE P. A QUANTITATIVE APPROACH TO THE ANALY-SIS OF SWIMMING BASED ON FORM AMONG CILIATED MARINE INVER-TEBRATE LARVAE (OCE-8120060); 24 MONTHS \$5,000
- PAYNE, RICHARD E. AND BEARDSLEY, ROBERT C. DESIGN AND CON-STRUCTION OF MOORED BUOY-MOUNTED METEOROLOGICAL RECORD-ING SYSTEMS FOR AIR-SEA INTERACTION EXPERIMENTS (OCE-8122051*); 12 MONTHS \$135,805
- LUYTEN, JAMES R. VOORHIS, ARTHUR D. BRADLEY, ALBERT M. AND WEBB, DOUGLAS C. DEVELOPMENT AND EVALUATION OF A BOTTOM MOUNTED, ACOUSTICALLY TRACKED, OCEAN CURRENT PROFILING INSTRUMENT (THE POP-UP PROFILER) (OCE-8200024*); 12 MONTHS \$244,000
- STOECKER, DIANE K. FEEDING HABITS AND DIVISION RATES OF MARINE PLANKTONIC PHYTOPHAGOUS CILIATES (OCE-8200030); 24 MONTHS \$105,000
- JOHNSON, DAVID A. MARINE GEOLOGICAL SAMPLES COLLECTION: WOODS HOLE OCEANOGRAPHIC INSTITUTION (OCE-8200119); 12 MONTHS \$42,179
- BRINK, KENNETH H. AND BEARDSLEY, ROBERT C. ANALYSIS AND SYNTHESIS OF SHELF CIRCULATION DATA FOR THE NEW ENGLAND SHELF: GEORGES BANK REGION (OCE-8200126); 18 MONTHS \$91,350
- CURRY, WILLIAM B. THE EFFECTS OF CLIMATIC CHANGE ON THE ABYSSAL CIRCULATION OF THE ATLANTIC OCEAN: A CARBON ISOTO-PIC APPROACH (OCE-8200151); 24 MONTHS \$96,269
- OWENS, W. B. U.S.-U.S.S.R. MID-OCEAN DYNAMICS EXPERIMENT (PO-LYMODE): ANALYSIS AND MODELING OF DYNAMIC BALANCES FOR THE LOCAL DYNAMICS EXPERIMENT (OCE-8200154); 12 MONTHS \$136,889
- VERONIS, GEORGE. SUMMER WORKSHOPS IN GEOPHYSICAL FLUID DYNAMICS: WOODS HOLE, MASSACHUSETTS (MATHEMATICAL SCI-ENCES) (02S-8200450*); 12 MONTHS \$10,000
- TUCHOLKE, BRIAN E. ACQUISITION, INSTALLATION AND INITIAL OP-ERATION OF A GENERAL INSTRUMENT CORPORATION SEABAM SYSTEM (OCE-8200731); 12 MONTHS \$256,786
- THOMPSON, GEOFFREY. A COOPERATIVE INVESTIGATION OF HYDRO- THERMAL AND GEOLOGICAL PROCESSES AT THE TAG HYDROTHER-MAL FIELD, MID-ATLANTIC RIDGE 26 DEGREES N (OCE-8200812*); 12 MONTHS \$314,993
- DRUFFEL, ELLEN. COLLECTION AND PRELIMINARY RADIOCARBON ANALYSES OF A LONG CORE OF AUSTRALIAN CORAL (OCE-8208251); 9 MONTHS \$48,907
- THOMPSON, GEOFFREY. PETROLOGICAL AND GEOCHEMICAL STUD-IES OF ROCKS FROM THE SOUTH ATLANTIC (OCE-8208407); 12 MONTHS \$97,202
- HONJO, SUSUMU. STUDY OF THE FLUX OF PARTICULATE AND AG-GREGATE MATTER IN THE DEEP OCEAN (OCE-8208736); 12 MONTHS \$179,669
- RICHARDSON, PHILIP L. THE SEASONAL EQUATORIAL ATLANTIC EX-PERIMENT (SEQUAL): A STUDY OF THE SEASONAL VARIABILITY OF THE NORTH EQUATORIAL COUNTERCURRENT (OCE-8208744); 10 MONTHS \$280,000
- SANDERS, HOWARD L. PAN-ATLANTIC DISTRIBUTION OF TWO MAJOR DEEP-SEA BENTHIC FAUNAL GROUPS WITH DIFFERING LIFE HISTORY PATTERNS (OCE-8208837); 12 MONTHS \$100,011
- HARBISON, G. R. THE BIOLOGY OF GELATINOUS ZOOPLANKTON: STUDIES ON OCEANIC TUNICATES, CTENOPHORES AND THEIR PARA-SITES AND PREDATORS (OCE-8209341*); 12 MONTHS \$41,654
- TAYLOR, CRAIG D. TRANSFORMATION OF ORGANIC COMPOUNDS IN THE ANAEROBIC MARINE ENVIRONMENT (OCE-8210420*); 12 MONTHS \$112,418
- DINSMORE, ROBERTSON P. SHIPBOARD SCIENTIFIC SUPPORT EQUIP-MENT - OCEANOGRAPHIC CABLE (OCE-8211540); 18 MONTHS \$265,551

MICHIGAN

UNIVERSITY OF MICHIGAN-ANN ARBOR

- BOYD, JOHN P.; *NONLINEAR EQUATORIAL WAVES* (OCE-7909191 A02*); 4 MONTHS \$75,161
- KILHAM, SUSAN S. AND KILHAM, PETER; *THE ROLE OF RESOURCE GRADIENTS IN STRUCTURING PHYTOPLANKTON COMMUNITIES FROM LAKE MICHIGAN* (OCE-8117377); 12 MONTHS \$44,935
- WILKINSON, BRUCE H. AND OWEN, ROBERT M.; *EARLY TERTIARY WESTERN PACIFIC CALCITE OOLITES* (OCE-8117699); 24 MONTHS \$31,738

MINNESOTA

UNIVERSITY OF MINNESOTA

- BANERJEE, SUBIR K.; *MAGNETIC PROPERTIES OF OCEANIC BASALTS: HYDROTHERMAL REACTIONS* (OCE-8018692 A01); 12 MONTHS \$52,095
- SEYFRIED, WILLIAM E.; *OCEANIC SERPENTINITES: ROLE OF SEAWATER-PERIDOTITE INTERACTION* (OCE-8200566); 24 MONTHS \$90,852
- ITO, EMI; *A COMPREHENSIVE STUDY OF OXYGEN AND RADIOGENIC ISOTOPE COMPOSITION AND TRACE ELEMENT CONCENTRATIONS OF MID-OCEAN RIDGE VOLCANIC GLASSES* (OCE-8201077); 24 MONTHS \$43,519

MISSISSIPPI

OFFICE OF NAVAL RESEARCH-OCEAN SCIENCE AND TECHNOLOGY DETACHMENT

- LA ROCHELLE, DAVID; *ACQUISITION OF OCEANOGRAPHIC CABLE* (OCE-8122065 A01); 6 MONTHS \$235,740
- KAULUM, KEITH W.; *SUPPORT FOR WINCH AND WIRE SEMINARS AND TECHNICAL HANDBOOK* (OCE-8214877); 12 MONTHS \$34,470

MISSOURI

WASHINGTON UNIVERSITY

- BATIZA, RODEY; *INTEGRATED GEOLOGIC AND GEOPHYSICAL STUDIES OF SUBMERGED OCEANIC VOLCANOES IN THE PACIFIC USING 'SEABEAM'* (OCE-8117135); 24 MONTHS \$61,430

NEW HAMPSHIRE

UNIVERSITY OF NEW HAMPSHIRE, DURHAM

- BROWN, WENDELL S. AND IRISH, JAMES D.; *COASTAL OCEAN DYNAMICS EXPERIMENT (CODE): THE PRESSURE PROGRAM* (OCE-8014940 A02); 12 MONTHS \$235,400
- JONES, GALEN E.; *METAL CONCENTRATION AND SPECIATION IN PORE WATERS OF ANOXIC MARINE SEDIMENTS AS A FUNCTION OF BACTERIAL ACTIVITIES* (OCE-8018460 A01); 12 MONTHS \$121,234

NEW JERSEY

FAIRLEIGH DICKINSON UNIVERSITY

- OGDEN, JOHN C.; *EXPANSION AND REFURBISHMENT OF THE SEAWATER SYSTEM OF THE WEST INDIES LABORATORY* (DEB-8209442*); 12 MONTHS \$10,000

PRINCETON UNIVERSITY

- SARMIENTO, JORGE L.; *DISTRIBUTION OF RADIUM-228 IN THE NORTH ATLANTIC* (OCE-8019952 A02*); 12 MONTHS \$46,985
- SARMIENTO, JORGE L. AND HELD, ISAAC M.; *GRADUATE STUDENT RESEARCH IN ATMOSPHERE-OCEAN INTERACTION AND CLIMATIC VARIABILITY (ATM-8106800 A01*); 12 MONTHS \$16,100*
- SARMIENTO, JORGE L.; *OCEAN TRACER DATA ANALYSIS, MODELING, AND MODEL EVALUATION* (OCE-8110155); 12 MONTHS \$49,523
- HARGRAVES, ROBERT B.; *A MAGNETIC & TRANSMISSION ELECTRON MICROSCOPY INVESTIGATION OF SYNTHETIC & NATURAL TITANOMAGNETITES & TITANOMAGHEMITES* (EAR-8115520*); 12 MONTHS \$25,385
- SARMIENTO, JORGE L.; *TRITUM IN THE TROPICAL NORTH ATLANTIC* (OCE-8117846); 12 MONTHS \$50,792

NEW MEXICO

NEW MEXICO STATE UNIVERSITY

- ODEGARD, MARK E.; *SEISMIC STRUCTURE OF THE NORTH PACIFIC CRUST AND UPPER MANTLE* (OCE-8208081); 24 MONTHS \$85,255

NEW YORK

AMERICAN MUSEUM OF NATURAL HISTORY

- WINSTON, JUDITH E.; *ECOLOGY OF CARIBBEAN CRYPTIC CORAL REEF COMMUNITIES* (OCE-8117852); 12 MONTHS \$21,301

CITY COLLEGE

- LEE, JOHN J.; *THE IMPACT OF FOOD QUALITY ON MATERIAL AND ENERGY FLOW IN MEIO AND MICROBENTHIC FOOD WEBS* (OCE-7825798 A02); \$9,790
- GALLAGHER, JANE C.; *PHYSIOLOGICAL VARIABILITY AND POPULATION GENETICS OF SKELETONEMA COSTATUM, A PLANKTONIC MARINE DIATOM* (BSR-8021744 A01*); 12 MONTHS \$24,000

COLUMBIA UNIVERSITY

- HAYS, JAMES D. AND ELDREDGE, NILES; *GLOBAL PATTERNS OF EVOLUTION IN THE RADIOLARIAN GENUS PTEROCANIUM* (DEB-8118743*); 24 MONTHS \$60,158
- ANDERSON, ROBERT; *THE GEOCHEMISTRY OF URANIUM IN ANOXIC BASINS* (OCE-8200143); 12 MONTHS \$35,898

COLUMBIA UNIVERSITY-LAMONT-DOHERTY GEOLOGICAL OBSERVATORY

- KING, KENNETH; *FOSSIL PROTEINS: CHEMICAL REACTIONS & GECHRONOLOGIC APPLICATIONS* (OCE-7808647 A03*); 6 MONTHS \$35,000
- GORDON, ARNOLD L.; *OCEANOGRAPHY AT THE CONFLUENCE OF THE FALKLAND AND BRAZIL CURRENTS* (OCE-7823860 A01); 12 MONTHS \$83,321
- MC INTYRE, ANDREW; *MIXING OF DEEP-SEA SEDIMENTS* (OCE-7918213 A03); 12 MONTHS \$61,134
- BURCKLE, LLOYD H. AND HAYS, JAMES D.; *CENOZOIC PALEOCEANOGRAPHY PROJECT (CENOP)* (OCE-7919092 A02); 12 MONTHS \$87,040
- PITMAN, WALTER C., BUHL, PETER, MUTTER, JOHN C. AND MOUNTAIN, GREGORY S.; *LARGE APERTURE SEISMIC EXPERIMENT (LASE)* (16E-792284 A02); 12 MONTHS \$33,000
- MORLEY, JOSEPH J. AND HAYS, JAMES D.; *LATE QUATERNARY STRATIGRAPHIC AND PALEOCLIMATIC SIGNIFICANCE OF THE RADIOLARIAN CYCLADOPHORA DAVISIANA* (OCE-7924563 A02); 12 MONTHS \$34,010
- CANDE, STEVEN C.; *RIDGE CREST SUBDUCTION ALONG THE SOUTHERN CHILE MARGIN (SUBMARINE GEOLOGY)* (OCE-7925384 A01); 12 MONTHS \$231,402
- GORDON, ARNOLD L.; *US-USSR WEDDELL POLYNYA EXPEDITION* (DPP-8005765 A01*); 12 MONTHS \$89,000
- BISHOP, JAMES K.; *PARTICULATE MATTER CHEMISTRY, SIZE DISTRIBUTIONS AND FLUXES IN WARM CORE GULF STREAM RING SYSTEMS* (OCE-8017468 A01*); 12 MONTHS \$183,794
- MC INTYRE, ANDREW; *THE ROLE OF THE ATLANTIC OCEAN IN NORTHERN HEMISPHERE GLACIATION* (OCE-8018177 A02*); 12 MONTHS \$76,196
- MC INTYRE, ANDREW; *THE ROLE OF THE ATLANTIC OCEAN IN NORTHERN HEMISPHERE GLACIATION* (OCE-8018177 A03*); \$400
- HAYES, DENNIS E.; *PLANNING, COORDINATION, AND FINAL SUMMATION OF THE U. S. SEATAR ACTIVITIES* (OCE-8018693 A01); 12 MONTHS \$50,881
- HAYES, DENNIS E.; *PLANNING COORDINATION AND FINAL SUMMATION OF THE U. S. SEATAR ACTIVITIES* (OCE-8018693 A02); \$8,000
- HAYS, JAMES D., CLINE, ROSE M., MC INTYRE, ANDREW, MORLEY, JOSEPH J. AND SHACKLETON, NICHOLAS; *PROJECT SPECMAP: MAPPING VARIATIONS IN OCEAN SPECTRA OVER A FREQUENCY RANGE 10⁻⁵ TO 10⁻¹ CYCLES PER YEAR (ATM-8019253 A01*); 12 MONTHS \$156,850*
- BROECKER, WALLACE S.; *GLACIAL TO INTERGLACIAL CHANGES IN OCEAN CHEMISTRY* (OCE-8019448 A01*); 12 MONTHS \$44,336
- LANGSETH, MARCUS G. AND HOBART, MICHAEL A.; *THERMAL AND CHEMICAL GRADIENTS ON THE FLANK OF THE COSTA RICA RIFT* (OCE-8019452 A01); 12 MONTHS \$203,507
- LANGSETH, MARCUS G. AND GERARD, ROBERT D.; *SHIP OPERATIONS SUPPORT* (OCE-8022112 A04); 10 MONTHS \$1,601,000
- LANGSETH, MARCUS G. AND GERARD, ROBERT D.; *SHIP OPERATIONS SUPPORT* (OCE-8022112 A05); 6 MONTHS \$148,150
- LANGSETH, MARCUS G.; *SHIP OPERATIONS SUPPORT* (OCE-8022112 A06); \$119,285
- BRYAN, GEORGE M.; *SHIPBOARD TECHNICIAN SUPPORT* (OCE-8022119 A01*); 12 MONTHS \$149,065
- BRYAN, GEORGE M.; *SHIPBOARD TECHNICIAN SUPPORT* (OCE-8022119 A02); \$15,000
- FAIRBANKS, RICHARD G.; *GLACIAL/INTERGLACIAL OCEAN CIRCULATION RECONSTRUCTIONS: NORTH AND SOUTH ATLANTIC* (OCE-8023211 A01); 12 MONTHS \$55,346
- LAWRENCE, JAMES R.; *GEOCHEMISTRY OF OCEANIC SEDIMENTS AND IGNEOUS ROCKS: STABLE ISOTOPE STUDIES* (OCE-8024044 A01); 12 MONTHS \$84,500
- KATZ, ELI J.; *INTERCOMPARISON OF INVERTED ECHO SOUNDERS WITH CONCURRENT HYDROGRAPHIC OBSERVATIONS IN THE EQUATORIAL ATLANTIC* (OCE-8024446 A01); 12 MONTHS \$69,626
- LADD, JOHN W.; *COLLABORATIVE RESEARCH ON BAHAMA CARBONATE BANKS: STRUCTURE AND TECTONICS PHASE II* (OCE-8024606); 12 MONTHS \$182,830
- MARRA, JOHN; *FRONTAL ZONE MIXING AND ITS INFLUENCE ON THE DEVELOPMENT AND DISSIPATION OF PHYTOPLANKTON POPULATIONS* (OCE-8024631 A01); 6 MONTHS \$22,036
- BONATTI, ENRICO; *A PETROLOGICAL STUDY OF OCEANIC ULTRAMAFIC ROCKS* (OCE-8025252 A01); 12 MONTHS \$78,600
- BROECKER, WALLACE S. AND ANDERSON, RAYMOND B.; *CALIBRATION AND VERIFICATION OF THE BOTTOM CHAMBERS* (OCE-8026793 A01*); 1 MONTHS \$107,301
- SANCETTA, CONSTANCE A.; *LATE PLEISTOCENE OCEANOGRAPHY OF THE NORTHWESTERN PACIFIC AND ITS MARGINAL SEAS* (OCE-8109933); 24 MONTHS \$125,194
- TAKAHASHI, TARO, AND CHIPMAN, DAVID W.; *NORTH ATLANTIC STUDY OF THE TRANSIENT TRACERS IN THE OCEAN PROGRAM (NAS/ITO): INVESTIGATION OF PCO₂ IN SEAWATER AND THE CARBONATE CHEMISTRY IN THE NORTH ATLANTIC OCEAN* (OCE-8110646 A01); 12 MONTHS \$64,904
- ANDERSON, ROGER N.; *HYDROGEOLOGY EXPERIMENTS ON D/V GLOMAR CHALLENGER IN 1981-1983* (OCE-8110919); 12 MONTHS \$131,036
- WATTS, ANTHONY B. AND BUHL, PETER; *MULTICHANNEL SEISMIC STUDY OF THE HAWAIIAN RIDGE: LITHOSPHERIC FLEXURE* (OCE-8111704); 12 MONTHS \$254,972
- KATZ, ELI J.; *THE SEASONAL EQUATORIAL ATLANTIC EXPERIMENT (SEQUAL): RESPONSE OF THE UPPER OCEAN TO THE ANNUAL WIND CYCLE* (OCE-8117000); 11 MONTHS \$210,701
- DAMUTH, JOHN E., KOLLA, VENKATARA, AND FLOOD, ROGER D.; *A STUDY OF THE MORPHOLOGY AND GROWTH PATTERN OF THE*

AMAZON CONE, A LARGE DEEP-SEA FAN OFF NORTHEAST BRAZIL, USING LONG-RANGE SIDESCAN SONAR (GLORIA) (OCE-8117469); 18 MONTHS \$200,006

HOUGHTON, ROBERT W. THE SEASONAL EQUATORIAL ATLANTIC EXPERIMENT (SEQUAL): ANNUAL CYCLE OF THE OCEAN THERMAL STRUCTURE IN THE GULF OF GUINEA (OCE-8117554); 12 MONTHS \$111,447

OU, HSIEN W. A STUDY OF THE DYNAMICS OF THE NEW ENGLAND SHELF BREAK FRONT (OCE-8117579); 12 MONTHS \$59,000

DUCKLOW, HUGH W. BACTERIAL ABUNDANCE, BIOMASS, AND PRODUCTION DISTRIBUTIONS IN WARM CORE GULF STREAM RINGS (OCE-8117713); 12 MONTHS \$61,596

BE, ALLAN W. PLANKTONIC FORAMINIFERA: EXPERIMENTAL FIELD AND LABORATORY STUDIES OF LIVING SPECIES FOR PALEOENVIRONMENTAL CALIBRATION (OCE-8117715*); 12 MONTHS \$180,039

RYAN, WILLIAM B. AND KASTENS, KIM A. SEDIMENTATION AND TECTONIC PROCESSES IN THE MEDITERRANEAN SEA: EBRO FAN AND MEDITERRANEAN RIDGE (OCE-8118069); 6 MONTHS \$50,105

COCHRAN, JAMES R. AND HAXBY, WILLIAM F. MID-OCEAN RIDGES: GLOBAL STUDY OF THERMAL AND MECHANICAL PROPERTIES (OCE-8118070); 12 MONTHS \$70,129

LANGSETH, MARCUS G. AND GERARD, ROBERT D. SHIPBOARD SCIENTIFIC SUPPORT EQUIPMENT (OCE-8118902); 12 MONTHS \$19,000

HIRSHMAN, JULES, LANGSETH, MARCUS G. AND GERARD, ROBERT D. SHIPBOARD SCIENTIFIC SUPPORT EQUIPMENT (OCE-8118902 A01); \$8,500

KENT, DENNIS V. AND LABRECQUE, JOHN L. GEOMAGNETIC REVERSAL TIME SCALES: CRETACEOUS TO RECENT (OCE-8119695); 18 MONTHS \$46,870

MARRA, JOHN. A TRACER KINETICS APPROACH TO THE PRODUCTION ECOLOGY OF OLIGOTROPHIC OCEANS (OCE-8121011); 18 MONTHS \$60,005

MCCOY, FLOYD W. MARINE GEOLOGICAL SAMPLE COLLECTIONS: LAMONT-DOHERTY GEOLOGICAL OBSERVATORY (OCE-8122083); 12 MONTHS \$86,000

FAIRBANKS, RICHARD G. STABLE ISOTOPE CHEMISTRY OF MODERN AND LATE PLEISTOCENE PLANKTONIC FORAMINIFERA: PALEOCEANOGRAPHIC APPLICATIONS (OCE-8200717); 24 MONTHS \$159,313

BISCAYE, PIERRE E. AND GARDNER, WILFORD D. FLUXES OF PARTICLES AND RADON IN VEMA CHANNEL (OCE-8200930); 12 MONTHS \$45,000

WEISSEL, JEFFREY K. INDIAN OCEAN: STUDY OF INTRAPLATE DEFORMATION (OCE-8202454); 18 MONTHS \$104,581

TAKAHASHI, TARO, AND CHIPMAN, DAVID W. CARBONATE CHEMISTRY IN THE TROPICAL AND EQUATORIAL ATLANTIC OCEAN (OCE-8202761); 12 MONTHS \$100,205

MC INTYRE, ANDREW, BREGER, DEE, AND BISCAYE, PIERRE E. A MODERN SCANNING ELECTRON MICROSCOPE FACILITY FOR LAMONT-DOHERTY GEOLOGICAL OBSERVATORY (OCE-8202776); 6 MONTHS \$168,042

ANDERSON, O ROGER, AND SWANBERG, NEIL R. FIELD AND EXPERIMENTAL STUDIES OF RADIOLARIAN BIOLOGY (OCE-8207495); 12 MONTHS \$142,397

FAIRBANKS, RICHARD G. THE ORIGIN OF CONTINENTAL SHELF AND SLOPE WATER IN THE MIDDLE ATLANTIC BIGHT AND GULF OF MAINE. EVIDENCE FROM H2180/H2160 RATIO MEASUREMENTS (OCE-8207998*); 12 MONTHS \$75,000

LADD, JOHN W. LEWIS, STEPHEN D. AND HAYES, DENNIS E. GEOPHYSICAL AND GEOLOGICAL STUDIES OF THE KODIAK-SHUMAGIN MARGIN OF THE ALBUTIAN TRENCH (OCE-8208833); 6 MONTHS \$28,629

GARZOLI, SILVIA L. AND KATZ, ELI J. THE SEASONAL EQUATORIAL ATLANTIC EXPERIMENT (SEQUAL): THE ANNUAL CYCLE OF THE WIND AND ITS FORCING OF THE UPPER OCEAN IN THE WESTERN EQUATORIAL ATLANTIC (OCE-8208992); 10 MONTHS \$97,443

WALKER, DAVID. CRYSTAL-LIQUID AND SORIT FRACTIONATION OF OCEANIC BASALT (OCE-8212489); 12 MONTHS \$92,839

CORNELL UNIVERSITY
MCFARLAND, WILLIAM N. FORAGING ECOLOGY OF HERBIVOROUS REEF FISHES IN MIXED-SPECIES FORAGING GROUPS (OCE-8121159); 24 MONTHS \$4,000

CORNELL UNIVERSITY-CORNELL UNIVERSITY - ENDOWED
ISACKS, BRYAN L. SEISMOTECTONICS OF THE BOUNDARIES OF THE PHILIPPINE SEA PLATE (OCE-8200940); 12 MONTHS \$11,885

SLOAN KETTERING INSTITUTE FOR CANCER RESEARCH
ANDERSON, ROBERT S. PRIMA I. I. EFFECTS OF POLLUTION ON IMMUNE COMPETENCE OF INVERTEBRATE MARINE ANIMALS (OCE-8016186 A01); 12 MONTHS \$84,081

STATE UNIVERSITY AT STONY BROOK
LEVINTON, JEFFREY S. THE LATITUDINAL COMPENSATION HYPOTHESIS: ENERGETIC AND GROWTH ADAPTATION IN AN HARPACTICOID COPEPOD (OCE-8018743 A01); 24 MONTHS \$65,320

LOPEZ, GLENN R. EFFECTS OF SEDIMENT-MICROBE ASSOCIATIONS ON DEPOSIT FEEDING MOLLUSCS (OCE-8025345 A01); \$17,000

LEVINTON, JEFFREY S. DEPOSIT-FEEDERS: THEIR RESOURCES AND THE STUDY OF RESOURCE LIMITATION AND COMPETITION (BIOLOGICAL OCEANOGRAPHY) (OCE-8108919 A01); 12 MONTHS \$52,664

BOWMAN, MALCOLM J. AND LAPENNAS, PATRICIA P. SHELF DYNAMICS AND PLANKTON PRODUCTION IN GREATER COOK STRAIT, NEW ZEALAND (OCE-8118238*); 12 MONTHS \$42,600

MALOUF, ROBERT E. AND BRICELI, V MONICA. DOCTORAL DISSERTATION RESEARCH: EFFECTS OF SUSPENDED INORGANIC PARTICULATES ON FEEDING AND GROWTH OF THE HARD CLAM MERCENARIA MERCENARIA (OCE-8121497); 24 MONTHS \$6,500

LEVINTON, JEFFREY S. AND GERHART, DONALD J. CHEMICAL DEFENSE ON THE CORAL REEF: THE ECOLOGICAL ROLES OF PROSTAGLANDINS IN THE CARIBBEAN OCTOCORAL PLEXAURA HOMOMALLA (OCE-8121788); 24 MONTHS \$9,000

CAPONE, DOUGLAS G. AND CARPENTER, EDWARD J. NITROGEN FIXATION AND DENITRIFICATION IN EELGRASS (ZOSTERA) BEDS (OCE-8200157); 24 MONTHS \$121,830

SCRANTON, MARY I. THE HYDROGEN CYCLE IN AN ANOXIC MARINE ENVIRONMENT (OCE-8207517*); 12 MONTHS \$45,000

FUHRMAN, JED A. DISSOLVED FREE AMINO ACID FORMATION IN SEAWATER AND ITS COUPLING TO UPTAKE (OCE-8207523*); 12 MONTHS \$46,516

PRITCHARD, DONALD W. A STUDY OF SPATIAL VARIATIONS IN THE TEMPORAL RESPONSE OF THE RESIDUAL CURRENTS TO METEOROLOGICAL FORCING IN ESTUARIES (OCE-8208363); 12 MONTHS \$45,654

UNION COLLEGE
ZIMMERMAN, HERMAN B. DISTRIBUTION OF CLAY MINERALS AND EVOLUTION OF THE ATLANTIC OCEAN (OCE-8207164); 18 MONTHS \$27,092

NORTH CAROLINA

DUKE UNIVERSITY

BARBER, RICHARD T. SHIPBOARD TECHNICIAN SUPPORT, R/V CAPE HATTERAS (OCE-8022417 A01); 12 MONTHS \$78,926

BARBER, RICHARD T. OCEANOGRAPHIC INSTRUMENTATION (OCE-8203033); 12 MONTHS \$52,990

USTACH, JOSEPH F. AND NELSON, ERIC B. A PROPOSAL FOR OUTFITTING COSTS < R/V CAPE HATTERAS (OCE-8213129); 6 MONTHS \$89,161

DUKE UNIVERSITY-MARINE LABORATORY

BARBER, RICHARD T. SHIP OPERATIONS SUPPORT (OCE-8022577 A01); 12 MONTHS \$550,000

BARBER, RICHARD T. SHIP OPERATIONS SUPPORT (OCE-8022577 A02); 9 MONTHS \$109,730

BARBER, RICHARD T. THE BIOLOGICAL RESPONSE TO VARIABILITY IN THE EASTERN EQUATORIAL PACIFIC (OCE-8110702 A01); 12 MONTHS \$144,978

COSTLOW, JOHN D. SUPPORT OF FIELD RESEARCH FACILITIES AT DUKE UNIVERSITY MARINE LABORATORY (DEB-8209422*); 12 MONTHS \$30,000

EAST CAROLINA UNIVERSITY

RIGGS, STANLEY R. GENESIS OF THE PHOSPHORITE SEDIMENT SEQUENCE ON THE MIDATLANTIC CONTINENTAL SHELF (OCE-8118164); 12 MONTHS \$87,500

NORTH CAROLINA STATE UNIVERSITY AT RALEIGH

WEISBERG, ROBERT H. SEASONAL VARIABILITY IN THE EQUATORIAL ATLANTIC (OCE-7923335 A01); 12 MONTHS \$98,000

NITTROUER, CHARLES A. AND DEMASTER, DAVID J. ACCUMULATION OF FINE-GRAINED SEDIMENT ON THE AMAZON CONTINENTAL SHELF (OCE-8117709); 12 MONTHS \$85,966

KAMYKOWSKI, DANIEL. DINOFLLAGELLATE SWIMMING BEHAVIOR IN RESPONSE TO CHANGES IN TEMPERATURE AND OTHER ENVIRONMENTAL FACTORS (29E-8200159); 12 MONTHS \$43,375

WEISBERG, ROBERT H. THE SEASONAL EQUATORIAL ATLANTIC EXPERIMENT (SEQUAL): RESPONSE OF THE UPPER OCEAN CIRCULATION TO THE ANNUAL WIND CYCLE (OCE-8211848); 12 MONTHS \$368,000

UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL-INSTITUTE OF MARINE SCIENCES

PETERSON, CHARLES H. AN EXPERIMENTAL APPROACH TO QUANTIFY THE IMPORTANCE OF PREDATION AND COMPETITION IN SOME BENTHIC SOFT-SEDIMENT SYSTEMS (OCE-7909323 A02); 12 MONTHS \$30,949

UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL

CRENSHAW, MILES. ECOPHYSIOLOGICAL SIGNIFICANCE OF METABOLIC ZONATION IN THE MANTLE OF INTERTIDAL EURYOXIC BIVALVE (OCE-8116709); 12 MONTHS \$2,840

NEUMANN, A. STUDIES OF EROSION AND DEPOSITION IN NORTH-WEST PROVIDENCE CHANNEL, BAHAMAS (OCE-8117615); 12 MONTHS \$68,920

MARTENS, C S. BIOGEOCHEMICAL CYCLING IN THE ORGANIC-RICH COASTAL ENVIRONMENT (OCE-8208666); 12 MONTHS \$97,384

OHIO

CASE WESTERN RESERVE UNIVERSITY

SAVIN, SAMUEL M. CENOZOIC PALEOCEANOGRAPHY PROJECT (CENOP) (OCE-7917017 A02); 12 MONTHS \$62,616

OVERLIN COLLEGE

EGLOFF, DAVID A. ANATOMICAL AND BEHAVIORAL STUDIES OF FEEDING IN NON-CALANOID COPEPODS ASSOCIATED WITH GULF STREAM WARM CORE RINGS (OCE-8206879*); 12 MONTHS \$17,153

OKLAHOMA

UNIVERSITY OF OKLAHOMA NORMAN CAMPUS

ATKINSON, GORDON. MEASUREMENT OF ION ASSOCIATION EQUILIBRIA AT HIGH PRESSURE (OCE-8119506); 12 MONTHS \$67,970

OREGON

OREGON STATE UNIVERSITY

KULM, LAVERNE D. AND KOMAR, PAUL D.; *SEDIMENTATION PROCESSES IN DEEP SEA TRENCHES: CHILE TRENCH* (OCE-7919361 A02); 12 MONTHS \$60,310

ALLEN, JOHN S.; *COASTAL OCEAN DYNAMICS EXPERIMENT (CODE): DYNAMICAL INTERPRETATION OF OBSERVATIONS AND COLLECTION OF COASTAL SEA LEVEL AND WIND DATA* (OCE-8014939 A02); 12 MONTHS \$85,000

HUYER, ADRIANA; *COASTAL OCEAN DYNAMICS EXPERIMENT (CODE): SHIPBOARD HYDROGRAPHY* (OCE-8014943 A02); 12 MONTHS \$168,000

NELSON, DAVID M.; *CYCLING OF SILICON AND THE ROLE OF SILICON IN PHYTOPLANKTON DYNAMICS IN GULF STREAM WARM-CORE RINGS* (OCE-8017269 A01); 12 MONTHS \$77,036

DILLON, THOMAS M. AND RICHMAN, JAMES G.; *MEASUREMENTS OF MICROSTRUCTURE AND TURBULENT DISSIPATION IN THE SURFACE WAVE ZONE* (OCE-8018445 A01); 12 MONTHS \$68,530

CHEN, CHEN-TUNG A.; *ON THE ROLE OF DEEP OCEANS AS A CO₂ SINK* (OCE-8018770 A02); 12 MONTHS \$50,954

MENGE, BRUCE A. AND LUBCHENCO, JANE; *HETEROGENEITY AND COMMUNITY ORGANIZATION IN A TEMPERATE AND A TROPICAL ROCKY INTERTIDAL COMMUNITY* (OCE-8019020 A01); 12 MONTHS \$147,294

PALFREY, KENNARD M.; *SHIPBOARD TECHNICIAN SUPPORT* (OCE-8021175 A02); 12 MONTHS \$131,841

PALFREY, KENNARD M.; *SHIP OPERATIONS SUPPORT* (OCE-8021176 A02); 12 MONTHS \$1,304,898

DYMOND, JACK R.; *NOBLE GAS STUDIES OF THE TRAPPED MANTLE GASES IN DEEP-SEA GLASSY BASALTS* (OCE-8024285 A01); 12 MONTHS \$83,957

DYMOND, JACK R.; *AN EVALUATION OF PARTICULATE FLUX TO THE SEA FLOOR AND ITS IMPORTANCE TO FERROMANGANESE NODULE GENESIS* (OCE-8026744 A01*); 12 MONTHS \$171,029

HEATH, G. ROSS; *MANOP PHASE III. SEDIMENTARY GEOCHEMISTRY AT MANOP LANDER SITES, AND MANOP CORE AND NODULE CURATION AND COLLECTION* (OCE-8101845 A01*); 12 MONTHS \$104,000

CALDWELL, DOUGLAS R.; *VERTICAL TRANSPORT IN SEAWATER* (OCE-8110320); 12 MONTHS \$75,000

NIILER, PEARL P.; *DIRECT MEASUREMENTS OF THE CIRCULATION IN THE NORTHEASTERN PACIFIC OCEAN* (OCE-8110408); 12 MONTHS \$18,000

PALFREY, KENNARD M.; *SHIPBOARD SCIENTIFIC SUPPORT EQUIPMENT* (OCE-8117443); 12 MONTHS \$81,318

RICHMAN, JAMES G. AND DE SZOEKE, ROLAND A.; *INVESTIGATION OF THE ROLE OF MIXING AND THE SURFACE MIXED LAYER IN THE DYNAMICS OF COASTAL UPWELLING* (OCE-8117694); 12 MONTHS \$72,000

DE SZOEKE, ROLAND A. AND LEVINE, MURRAY D.; *INTERNATIONAL SOUTHERN OCEAN STUDIES (ISOS): HEAT TRANSPORT, VORTICITY BALANCE AND THEORY* (OCE-8117700); 12 MONTHS \$66,000

KULM, LAVERNE D.; *ORIGIN AND DIAGENETIC HISTORY OF DOLOMITE ON THE PERU CONTINENTAL MARGIN* (OCE-8118006); 18 MONTHS \$83,811

KELLER, GEORGE H.; *OCEANOGRAPHIC INSTRUMENTATION* (OCE-8118067); 12 MONTHS \$48,765

SIMONETT, BERND R.; *HYDROTHERMAL PETROLEUM GENESIS IN GUAYMAS BASIN, GULF OF CALIFORNIA* (OCE-8118897); 12 MONTHS \$45,630

PILLSBURY, R. D., SMITH, ROBERT L. AND HUYER, ADRIANA; *COMPUTER EQUIPMENT UPGRADE* (OCE-8120415*); 12 MONTHS \$90,800

LEVI, SHAUL; *PARTIAL FUNDING OF A SUPERCONDUCTING MAGNETOMETER SYSTEM* (EAR-8121385*); 12 MONTHS \$35,000

SMALL, LAWRENCE F.; *ALGAL-GRAZER INTERACTIONS IN THE MARINE ENVIRONMENT* (OCE-8121631); 24 MONTHS \$134,998

SCHRADER, HANS J., SCHEIDEGGER, KENNETH F. AND PISIAS, NICKLAS G.; *VARVED SEDIMENTS FROM THE SOUTHERN GULF OF CALIFORNIA: A CLIMATOLOGICAL STUDY OF PROXIES OVER THE LAST 24,000 YEARS* (ATM-8121775*); 12 MONTHS \$60,000

SCHRADER, HANS J.; *MARINE GEOLOGICAL SAMPLE COLLECTIONS: OREGON STATE UNIVERSITY* (OCE-8121974); 12 MONTHS \$22,855

SCHEIDEGGER, KENNETH F.; *EVOLUTION OF A DROWNED RIVER VALLEY ESTUARY IN THE PACIFIC NORTHWEST* (OCE-8200160); 18 MONTHS \$45,802

MILLER, CHARLES B.; *MOLTING RATES OF PELAGIC COPEPODS* (OCE-8201899); 12 MONTHS \$40,027

PISIAS, NICKLAS G.; *PROJECT SPECMAP: MAPPING VARIATIONS IN OCEAN SPECTRA OVER A FREQUENCY RANGE 10-5 TO 10-1 CYCLES PER YEAR* (ATM-8204127*); 12 MONTHS \$14,070

WHEELER, PATRICIA A.; *RATES OF LABELING OF PHYTOPLANKTON NITROGEN: REEVALUATION OF 15N-TRACER MEASUREMENTS OF NH₄ UPTAKE* (OCE-8208873); 12 MONTHS \$70,000

UNIVERSITY OF OREGON - EUGENE

HOLSER, WILLIAM T.; *THE INITIAL ATLANTIC RIFT: EVAPORITES FROM DSDP SITE 546 AND MOROCCO* (OCE-8200221*); 18 MONTHS \$29,387

PENNSYLVANIA

BUCKNELL UNIVERSITY

HOFFMAN, DANIEL L.; *CYPRID RECRUITMENT INTO AGGREGATES OF THE LEAF BARNACLE, POLIPICES POLYMERUS. THE POSITION EFFECT* (BIOLOGICAL OCEANOGRAPHY) (OCE-8120943); 24 MONTHS \$31,800

LEHIGH UNIVERSITY

CARSON, BOBB; *MODERN SEDIMENT TRANSPORT AND ACCUMULATION IN QUINLAULT CANYON* (OCE-8208460); 12 MONTHS \$104,900

RHODE ISLAND

BROWN UNIVERSITY

IMBRIE, JOHN; *CLIMATE, LONG-RANGE INVESTIGATIONS, MAPPING AND PREDICTION (CLIMAP): GLOBAL PALEO-OCEANOGRAPHIC STUDIES OF LATE QUATERNARY OCEAN CIRCULATION AND CLIMATE* (OCE-7722888 A06); 12 MONTHS \$149,900

IMBRIE, JOHN, AND PRELL, WARREN L.; *PROJECT SPECMAP: MAPPING VARIATIONS IN OCEAN SPECTRA OVER A FREQUENCY RANGE 10-5 TO 10-1 CYCLES PER YEAR* (ATM-8018897 A01*); 12 MONTHS \$103,750

PRELL, WARREN L.; *EVOLUTION OF MODES OF OCEANIC VARIABILITY DURING THE PLIO-PLEISTOCENE* (OCE-8109456 A01); 12 MONTHS \$83,742

MATTHEWS, R. K.; *ISOTOPIC PALEO-OCEANOGRAPHY: HIGH FREQUENCY PLIO-MIOCENE OXYGEN ISOTOPE VARIATIONS* (OCE-8208536); 24 MONTHS \$113,457

FORSYTH, DONALD W.; *STRUCTURE AND DYNAMICS OF MID-OCEAN RIDGES AND TRANSFORM FAULTS: NORTH ATLANTIC OCEAN* (OCE-8208634); 24 MONTHS \$116,463

GORDON RESEARCH CONFERENCES

CRUICKSHANK, ALEXANDER M.; *INTERNATIONAL TRAVEL FUNDS FOR FOREIGN SCIENTISTS TO ATTEND THE WINTER 1983 GORDON RESEARCH CONFERENCE ON CHEMICAL OCEANOGRAPHY* (OCE-8212180); 12 MONTHS \$7,883

UNIVERSITY OF RHODE ISLAND-GRADUATE SCHOOL OF OCEANOGRAPHY

SIGURDSSON, HARALDUR; *PETROGRAPHIC PROVINCES OF THE MID-ATLANTIC RIDGE* (OCE-7913805 A02); 12 MONTHS \$45,624

KENNETT, JAMES P., MOORE, THEODORE C. AND BENDER, MICHAEL L.; *CENOZOIC PALEO-OCEANOGRAPHY (CENOP)* (OCE-7914594 A03); 12 MONTHS \$185,280

DURBIN, EDWARD G.; *A COMPARISON OF THE BIOENERGETICS OF FEEDING IN TWO PLANKTON FEEDING FISHES: THE MENHADEN BREVOORTIA TYRANNUS AND THE HERRING CLUPEA HARENGUS* (OCE-7919551 A02); 6 MONTHS \$59,897

SMAYDA, THEODORE J. AND HITCHCOCK, GARY L.; *PRODUCTION AND BIOMASS FEATURES OF PHYTOPLANKTON SIZE CLASSES ENTRAINED IN WARM CORE RINGS AND SURROUNDING WATERMASSSES* (OCE-8017272 A01); 12 MONTHS \$126,904

QUINN, JAMES G. AND REQUEJO, ADOLFO G.; *GEOCHEMISTRY OF CYCLOALKENES IN ESTUARINE AND COASTAL SEDIMENTS* (OCE-8018831 A01); 12 MONTHS \$33,615

LEINEN, MARGARET; *PROJECT SPECMAP: MAPPING VARIATIONS IN OCEAN SPECTRA OVER A FREQUENCY RANGE 10-5 TO 10-1 CYCLES PER YEAR* (ATM-8018896 A02*); 12 MONTHS \$42,000

KENNETT, JAMES P.; *HIGH RESOLUTION HOLOCENE PALEOCLIMATOLOGY AND STRATIGRAPHY, ORCA BASIN, GULF OF MEXICO* (ATM-8019059 A01*); 12 MONTHS \$19,500

EVANS, DAVID L.; *VERTICAL PROFILING OF VELOCITY, DENSITY, AND DISSIPATION* (OCE-8019859 A01); 12 MONTHS \$58,079

GRIFFIN, JAMES J. AND HAHN, WILLIAM B.; *SHIPBOARD TECHNICIAN SUPPORT* (OCE-8021925 A01); 12 MONTHS \$146,133

KNAUSS, JOHN A.; *SHIP OPERATIONS SUPPORT* (OCE-8021926 A01); 12 MONTHS \$1,309,356

KESTER, DANA R.; *CHEMICAL STUDIES OF NUTRIENTS IN WARM CORE RINGS* (OCE-8022989 A01*); 12 MONTHS \$59,576

BENDER, MICHAEL L. AND HEGGIE, DAVID T.; *BENTHIC FLUXES AND PORE WATER GEOCHEMISTRY AT BOTTOM LANDER SITES* (OCE-8101830 A01*); 12 MONTHS \$92,178

DETRICK, R. S.; *EQUIPMENT GRANT: A SEISMIC PROFILING SYSTEM FOR R/V ENDEAVOR* (OCE-8108935 A01*); \$88,999

ROSSBY, THOMAS; *STUDIES OF THE VELOCITY STRUCTURE OF THE GULF STREAM INCLUDING MASS AND HEAT TRANSPORT EAST OF CAPE HATTERAS* (OCE-8110914 A01); 12 MONTHS \$34,985

ROSSBY, THOMAS; *LAGRANGIAN STUDIES OF OCEAN CIRCULATION IN THE WESTERN NORTH ATLANTIC* (OCE-8111498); 12 MONTHS \$190,000

DUCE, ROBERT A. AND FASCHING, JAMES L.; *SEA-AIR EXCHANGE PROJECT (SEAREX) - MANAGEMENT AND FIELD SUPPORT PROGRAM* (OCE-8111894 A01); 12 MONTHS \$665,008

DUCE, ROBERT A., FASCHING, JAMES L. AND MERRILL, JOHN T.; *SEA-AIR EXCHANGE PROJECT (SEAREX) - ANOMALOUSLY ENRICHED ELEMENTS IN THE MARINE ATMOSPHERE: SOURCES, FLUXES AND OCEANIC EXCHANGE MECHANISMS* (OCE-8111895 A01); 12 MONTHS \$418,184

DRISCOLL, ALAN H.; *ACQUISITION AND INSTALLATION OF AN OCEANOGRAPHIC WINCH FOR R/V ENDEAVOR* (OCE-8117401); 12 MONTHS \$370,038

NAPORA, THEODORE A.; *THE EFFECTS OF SMALL SCALE PATCHINESS OF PHYTOPLANKTON ON COPEPOD SWIMMING BEHAVIOR* (OCE-8117823); 4 MONTHS \$5,500

KESTER, DANA R.; *INVESTIGATION OF COPPER DISTRIBUTIONS AND SPECIATION IN WARM CORE RINGS* (OCE-8117848); 12 MONTHS \$79,377

MACINTYRE, FERREN; *ACOUSTICAL BUBBLE SPECTROMETER* (OCE-8117849); 12 MONTHS \$121,120

KESTER, DANA R.; *PHYSICAL CHEMISTRY OF COPPER IN SEAWATER* (OCE-8117850); 12 MONTHS \$58,494

BENDER, MICHAEL L.; *MEASUREMENT OF PHOTOSYNTHETIC RATE USING STABLE OXYGEN ISOTOPES* (OCE-8118343*); 12 MONTHS \$51,471

GRIFFIN, JAMES J. AND HAHN, WILLIAM B.; *SHIPBOARD SCIENTIFIC SUPPORT EQUIPMENT* (OCE-8118484); 12 MONTHS \$43,510

GRIFFIN, JAMES J. AND HAHN, WILLIAM B.; *OCEANOGRAPHIC INSTRUMENTATION* (OCE-8118486); 12 MONTHS \$77,513

SIEBUTH, JOHN M. MARINE PICOPANKTON AND NANOPLANKTON CHARACTERIZATION, CULTURE AND DIEL TROPHODYNAMICS (OCE-8121881); 12 MONTHS \$180,000

SCHILLING, JEAN-GUY. GEOCHEMICAL STUDY OF SOUTH ATLANTIC MID-ATLANTIC RIDGE BASALTS FROM 1 DEGREE S TO 47 DEGREES S, AND ORIGIN OF HOTSPOTS (OCE-8200137); 12 MONTHS \$68,900

DRISCOLL, ALAN H. MARINE GEOLOGICAL SAMPLE COLLECTIONS UNIVERSITY OF RHODE ISLAND (OCE-8201097); 12 MONTHS \$21,291

WATTS, D. R. A STUDY OF GULF STREAM MEANDERS (OCE-8201222); 12 MONTHS \$190,000

GRIFFIN, JAMES J. VALVE OPERATING GEAR, R/V ENDEAVOR (OCE-8206031); 12 MONTHS \$20,365

WISHNER, KAREN. DEEP-SEA BENTHIC BOUNDARY LAYER BIOLOGY: ZOOPLANKTON TROPHODYNAMICS (OCE-8207922); 12 MONTHS \$15,971

SCHILLING, JEAN-GUY. PETROLOGICAL AND GEOCHEMICAL STUDIES OF ROCKS FROM THE SOUTH ATLANTIC (OCE-8208014); 12 MONTHS \$61,600

UNIVERSITY OF RHODE ISLAND

DAUPHIN, J. PAUL. STUDIES OF PROCESSES CONTROLLING THE COMPOSITION AND DISTRIBUTION OF DEEP-SEA FERROMANGANESE NODULES: MANOP COORDINATION AND TRAVEL (OCE-8100182 A01*); 12 MONTHS \$166,197

DRISCOLL, ALAN H. ENGINEERING DESIGN OF LONG CORE FACILITY PHASE 2 (OCE-8115646*); 18 MONTHS \$160,292

SWIFT, ELIJAH. THE BIOLOGY OF OCEANIC DINOFLAGELLATES, NATURAL DIVISION RATES, BIOLUMINESCENCE AND PHAGOTROPHY (OCE-8117744); 12 MONTHS \$52,250

QUINN, JAMES G. CHEMICAL STUDIES OF COPPER-ORGANIC COMPLEXES IN ESTUARINE AND COASTAL WATERS (OCE-8200150); 12 MONTHS \$48,058

FOX, PAUL J. DETRICK, ROBERT S. AND LARSON, ROGER L. ACQUISITION, INSTALLATION AND INITIAL OPERATION OF A SEABEAM SYSTEM (OCE-8201397*); 12 MONTHS \$375,000

SOUTH CAROLINA

UNIVERSITY OF SOUTH CAROLINA AT COLUMBIA

FELLER, ROBERT J. IMMUNOLOGICAL DETECTION OF DETRITUS AND MEIOFAUNA WITHIN SALT MARSH BENTHIC FOOD WEBS (OCE-7919473 A01); 36 MONTHS \$120,479

THUNELL, ROBERT C. FORAMINIFERAL BIOGEOGRAPHY OF LATE NEOCENE ANOXIC ENVIRONMENTS IN THE EASTERN MEDITERRANEAN (OCE-7923736 A01); 36 MONTHS \$111,760

MOORE, WILLARD S. DISTRIBUTION OF RADIUM-228 IN THE NORTH ATLANTIC (OCE-8019700 A01*); 12 MONTHS \$44,169

MOORE, WILLARD S. RADIOCHEMICAL STUDIES OF MANGANESE NODULE DEPOSITION PROCESSES (OCE-8100038 A01*); 12 MONTHS \$91,714

WETHEY, DAVID S. GEOGRAPHIC LIMITS AND LOCAL ZONATION OF INTERTIDAL BARNACLES (OCE-8208176); 36 MONTHS \$83,497

WILLIAMS, DOUGLAS F. AND HEALY-WILLIAMS, NANCY. STABLE ISOTOPE STUDIES OF FOSSIL FORAMINIFERA: PALEOECOLOGIC AND PALEOCLIMATIC IMPLICATIONS (OCE-8208911); 24 MONTHS \$60,478

TEXAS

TEXAS A & M UNIVERSITY

VASTANO, ANDREW C. NORTH PACIFIC EXPERIMENT (NORPAX): TRAJECTORY AND TEMPERATURE ANALYSES OF SATELLITE TRACKED BUOY OBSERVATIONS IN THE NORTH PACIFIC (OCE-7921271 A02); 4 MONTHS \$5,000

SCHINK, DAVID R. AND GUINASSO, NORMAN L. RADON AND RADIUM IN WARM CORE RINGS (OCE-8017268 A01*); 12 MONTHS \$112,809

SICILIO, FRED, AND GIAM, CHOO SENG. POLLUTANT RESPONSES IN MARINE ANIMALS (PRIMA): ANALYTICAL CHEMISTRY (OCE-8019601 A02); 12 MONTHS \$236,479

BROOKS, J. M. STUDIES OF VOLATILE ORGANICS IN THE OCEAN (OCE-8020560 A01); 12 MONTHS \$62,293

TREADWELL, T. K. SHIP OPERATIONS SUPPORT (OCE-8021923 A04); 12 MONTHS \$715,957

TREADWELL, T. K. SHIPBOARD TECHNICIAN SUPPORT (OCE-8022352 A01); 12 MONTHS \$125,000

FRYXELL, GRETA A. PHYTOPLANKTON TAXA IN WARM CORE RINGS: QUANTITATIVE AND COMPARATIVE STUDIES (OCE-8101785 A01); 12 MONTHS \$67,335

STANTON, ROBERT J. LATE NEOCENE OCEANOGRAPHIC HISTORY OF THE CARIBBEAN AND EASTERN EQUATORIAL PACIFIC BASIN (OCE-8117497); 24 MONTHS \$106,664

TREADWELL, T. K. OCEANOGRAPHIC INSTRUMENTATION (OCE-8117546); 12 MONTHS \$116,500

TREADWELL, T. K. SHIPBOARD SCIENTIFIC SUPPORT EQUIPMENT (OCE-8117547); 12 MONTHS \$30,500

SCOTT, MARTHA R. URANIUM, THORIUM AND PLUTONIUM ISOTOPES: BEHAVIOR AT THE INTERFACE BETWEEN RIVERS AND THE OCEAN (OCE-8117610); 12 MONTHS \$52,448

NOWLIN, WORTH D. INTERNATIONAL SOUTHERN OCEAN STUDIES (ISOS): STRUCTURE AND DYNAMICS OF THE ANTARCTIC CIRCUMPOLAR CURRENT AT DRAKE PASSAGE (OCE-8121625); 12 MONTHS \$300,000

BROOKS, DAVID A. UPWELLING AND MIXING OF HEAT, SALT, AND NUTRIENTS IN MAINE SHELF WATERS (OCE-8121971); 12 MONTHS \$95,575

MORSE, JOHN W. DETERMINATION OF THE SOLUBILITY OF CALCITE AND ARAGONITE IN SEAWATER (OCE-821347); 12 MONTHS \$99,442

UNIV OF TEXAS AT AUSTIN-MARINE SCIENCE INSTITUTE AT GALVESTON

MCCOWAN, DOUGLAS W. LARGE APERTURE SEISMIC EXPERIMENT (LASE) (16E-8001728 A03); 12 MONTHS \$30,900

BUFFLER, RICHARD T. GEOLOGIC HISTORY OF THE DEEP GULF OF MEXICO BASIN (OCE-8209154); 12 MONTHS \$81,129

FROHLICH, CLIFFORD A. OCEAN BOTTOM SEISMOGRAPH RESEARCH IN THE SAVU BASIN, INDONESIA (OCE-8210506); 12 MONTHS \$41,773

UNIV OF TEXAS AT AUSTIN-MARINE SCIENCE INSTITUTE AT PORT ARANSAS

THOMPSON, JOHN H. SHIPBOARD SCIENTIFIC SUPPORT EQUIPMENT (OCE-8118483); 12 MONTHS \$21,320

UNIVERSITY OF HOUSTON CENTRAL CAMPUS

ELTHON, DONALD L. PETROLOGICAL AND GEOCHEMICAL STUDY OF GABBROIC ROCKS: MID-CAYMAN RISE AND OCEANOGRAPHIC FRACTURE ZONE (OCE-8121232); 36 MONTHS \$71,234

VIRGINIA

AMERICAN GEOLOGICAL INSTITUTE

UNKLESBAY, A. G. TRAVEL OF UNITED STATES SCIENTISTS TO XITH CONGRESS OF INTERNATIONAL ASSOCIATION FOR QUATERNARY RESEARCH, MOSCOW, USSR, AUGUST 1-9, 1982 (OAR-8206681*); 6 MONTHS \$2,000

AMERICAN INSTITUTE OF BIOLOGICAL SCIENCES

GENTILE, ARTHUR C. THE FOURTH SYMPOSIUM ON DISSERTATIONS ON CHEMICAL OCEANOGRAPHY (29E-8204107); 12 MONTHS \$10,923

OLD DOMINION UNIVERSITY

WHITTECAR, G. RICHARD. ACQUISITION OF MOBILE DRILLING RIG FOR RESEARCH ON OUTER COASTAL PLAIN (PRM-8206042*); 12 MONTHS \$17,496

WASHINGTON

UNIVERSITY OF WASHINGTON

JUMARS, PETER A. THE ROLE OF PREDATION IN SOFT-BOTTOM BENTHIC SUCCESSION (OCE-7824687 A03); 6 MONTHS \$12,916

HOLLOWAY, GREG. JOINT U.S.-U.S.S.R. MID-OCEAN DYNAMICS EXPERIMENT (POLYMODE): STATISTICAL DYNAMICS OF OCEAN EDDIES, CIRCULATION, AND MIXING (OCE-7923648 A01); 5 MONTHS \$9,901

WELANDER, PIERRE. THEORETICAL MODELLING OF OCEAN CIRCULATION AND OCEANATMOSPHERE INTERACTION (OCE-8007927 A02); 1 MONTHS \$10,500

STRATHMANN, RICHARD R. MARINE INVERTEBRATE LARVAE FEEDING WITH CILIA (OCE-8008310 A01); 12 MONTHS \$26,872

WISSMAR, ROBERT C. SIMENSTAD, CHARLES A. AND EGGERS, DOUGLAS M. OPTIMAL MANAGEMENT OF CHUM SALMON (OCE-8008637 A03*); 12 MONTHS \$30,495

EMERSON, STEVEN R. THE EFFECT OF ANAEROBIC PROCESSES ON THE CHEMISTRY OF SEAWATER (OCE-8018189 A01); 12 MONTHS \$79,963

NOWELL, ARTHUR R. TIME DEPENDENT TURBULENT BOUNDARY LAYERS IN TIDAL FLOWS (OCE-8018304 A01); 12 MONTHS \$93,029

MURRAY, JAMES W. DIAGENESIS IN MARINE SEDIMENTS (OCE-8018317 A01); 12 MONTHS \$59,935

MURRAY, JAMES W. MECHANISMS CONTROLLING THE DISTRIBUTION OF TRACE METALS IN SEAWATER (OCE-8018335 A01); 12 MONTHS \$68,526

ANDERSON, GEORGE C. AND WATKINS, J. BOYCE. SHIPBOARD TECHNICIAN SUPPORT (OCE-8021921 A01); 12 MONTHS \$91,880

ANDERSON, GEORGE C. AND WATKINS, J. BOYCE. SHIP OPERATIONS SUPPORT (OCE-8022121 A01); 12 MONTHS \$1,744,825

HICKEY, BARBARA M. NON-LOCAL FORCING ON NORTHWESTERN CONTINENTAL SHELVES (OCE-8024465 A01); 12 MONTHS \$76,985

HEDGES, JOHN I. GEOCHEMISTRY OF HUMIC SUBSTANCES IN RECENT MARINE SEDIMENTS (OCE-8023970 A01); 12 MONTHS \$94,007

WEARN, RICHARD B. AND BAKER, D. JAMES. INTERNATIONAL SOUTHERN OCEAN STUDIES (ISOS): DYNAMICAL RESPONSE AND TRANSPORT OF THE ANTARCTIC CIRCUMPOLAR CURRENT (OCE-8024905 A01); 6 MONTHS \$45,200

TAFT, BRUCE A. AND MCWILLIAMS, JAMES C. JOINT U.S. - U.S.S.R. MID-OCEAN DYNAMICS EXPERIMENT (POLYMODE): INTERPRETATION OF DENTIST MEASUREMENT FROM A LOCAL DYNAMICS EXPERIMENT (OCE-8024912 A01); 12 MONTHS \$197,000

TAFT, BRUCE A. NORTH PACIFIC EXPERIMENT (NORPAX): ANALYSIS OF DENSITY AND OXYGEN DATA FROM HAWAII-TAHITI SHUTTLE EXPERIMENT (OCE-8024913 A01); 5 MONTHS \$13,792

PAINE, ROBERT T. FAUNAL AND TROPHIC STUDIES OF ROCKY INTERTIDAL COMMUNITIES (OCE-8025578 A01); 12 MONTHS \$65,066

MURRAY, JAMES W. GEOCHEMISTRY OF THE SEDIMENT/WATER INTERFACE (OCE-8101844 A01*); 12 MONTHS \$64,745

EMERSON, STEVEN R. DIAGENESIS AND DIFFUSION IN INTERSTITIAL WATERS (OCE-8101846 A01*); 12 MONTHS \$66,813

STUIVER, MINZE. ELEVENTH INTERNATIONAL RADIOCARBON CONFERENCE (ATM-8107137*); 12 MONTHS \$6,000

FROST, BRUCE W. FOOD LIMITATION IN MARINE ZOOPLANKTON (OCE-8108673 A01); 12 MONTHS \$78,797

DELANEY, JOHN R. AND MATHEZ, EDMOND A. GEOCHEMISTRY OF CARBON IN SUBMARINE BASALTS AND PERIDOTITE NODULES (OCE-8110149); 24 MONTHS \$94,907

RATRAY, MAURICE. BAROCLINIC RESPONSE OF WIDE, DEEP ESTUARIES TO OFFSHORE ATMOSPHERIC FORCING - WITH APPLICATION TO THE STRAIT OF JUAN DE FUCA (OCE-8110708*); 12 MONTHS \$18,397

SMITH, J DUNGAN; MIXING IN STRATIFIED ESTUARIES (OCE-8110915 A01); 12 MONTHS \$84,753

DELANEY, JOHN R. AND JOHNSON, HARLAN P.; THE EVOLUTION OF A HOT SPOT RIDGE CREST INTERACTION: AN INTENSIVE STUDY OF THE JUAN DE FUCA RIDGE (OCE-8111131); 12 MONTHS \$232,081

EWART, TERRY E. AND MURPHY, STANLEY R.; DEEP OCEAN MIXING AND TEMPERATURE STRUCTURE STUDIES (OCE-8111499 A01); \$20,000

STERNBERG, RICHARD W.; MEASUREMENTS OF SUSPENDED SEDIMENT AND BOUNDARY LAYER FLOW IN THE SHALLOW MARINE ENVIRONMENT (OCE-8111500); 24 MONTHS \$100,000

SCOTT, WILLIAM D.; ACQUISITION OF ION BEAM THINNER (DMR-8114765*); 12 MONTHS \$5,000

PAINE, ROBERT T.; THE EVOLUTIONARY INTER DEPENDENCIES OF FISH BEHAVIORS ON THE CARIBBEAN CORAL REEFS (OCE-8115709); 12 MONTHS \$7,850

LORENZEN, CARL J.; ORIGIN AND DISTRIBUTION OF ORGANIC MATTER IN THE DEEP SEA (OCE-8116790); 12 MONTHS \$98,547

RODEN, GUNNAR I. AND TAFT, BRUCE A.; A STUDY OF THE THERMOHALINE STRUCTURE AND CIRCULATION NEAR THE EMPEROR SEAMOUNTS (OCE-8117047); 12 MONTHS \$442,019

JUMARS, PETER A. AND NOWELL, ARTHUR R.; GEOPHYSICAL SEDIMENT TRANSPORT EFFECTS ON DEPOSIT FEEDERS (OCE-8117397*); 12 MONTHS \$45,474

ANDERSON, GEORGE C. AND WATKINS, J BOYCE; SHIPBOARD SCIENTIFIC SUPPORT EQUIPMENT (OCE-8117928); 12 MONTHS \$32,700

ANDERSON, GEORGE C.; OCEANOGRAPHIC INSTRUMENTATION (OCE-8117900); 12 MONTHS \$81,885

AHMED, SAIED I.; STUDIES OF NITROGEN ASSIMILATION IN MARINE PHYTOPLANKTON: MODULATIONS IN UPTAKE, INTERNAL POOLS AND ENZYMES AS A RESPONSE TO CHANGES IN NUTRIENT AND LIGHT REGIMES (OCE-8117937); 12 MONTHS \$90,130

LANDRY, MICHAEL R.; PHYTOPLANKTON-MICROCONSUMER INTERACTIONS IN THE OLIGOTROPHIC OCEANS (OCE-8120842); 18 MONTHS \$44,996

MC DUFF, RUSSELL E.; CHEMICAL PROCESSES OCCURRING DURING MIXING OF HYDROTHERMAL FLUIDS AND SEAWATER (OCE-8200980); 12 MONTHS \$46,845

BARBEE, WILLIAM D.; SUPPORT FOR THE UNIVERSITY-NATIONAL OCEANOGRAPHIC LABORATORY SYSTEM (UNOLS) OFFICE (OCE-8207326); 12 MONTHS \$115,850

BARBEE, WILLIAM D.; SUPPORT FOR THE UNIVERSITY - NATIONAL OCEANOGRAPHIC LABORATORY SYSTEM (UNOLS) OFFICE (OCE-8207326 A01); 6 MONTHS \$26,495

HAYES, STANLEY P.; AN INVESTIGATION OF THE TRANSPORTS AND SPATIAL SCALES OF CURRENTS IN THE EQUATORIAL PACIFIC (OCE-8210520); 12 MONTHS \$77,760

WISCONSIN

UNIVERSITY OF WISCONSIN-MADISON

HASTENRATH, STEFAN L.; SEASONAL HEAT BUDGET AND THERMAL STRUCTURE OF THE TROPICAL OCEANS (OCE-8120583*); 12 MONTHS \$31,000

ASTRONOMY

ARIZONA

ARIZONA STATE UNIVERSITY

STARRFIELD, SUMNER; THEORETICAL STUDIES OF THE NOVA OUTBURST AND RELATED PROCESSES (AST-8117177); 24 MONTHS \$92,000

LOWELL OBSERVATORY

WHITE, NATHANIEL M.; PHOTOELECTRIC OBSERVATIONS OF LUNAR OCCULTATIONS (AST-8116310); 24 MONTHS \$82,500

UNIVERSITY OF ARIZONA-AGRICULTURAL EXPERIMENT STATION

SCOTT, JOHN S. AND ANGEL, J R P.; MULTI-APERTURE SPECTROSCOPY (AST-8116965); 12 MONTHS \$44,300

UNIVERSITY OF ARIZONA

RIEKE, GEORGE H. AND LEBOWSKY, MARCIA J.; STUDIES OF EXTRAGALACTIC INFRARED SOURCES (AST-8020603 A01); 12 MONTHS \$154,600

LIEBERT, JAMES W. AND GREEN, RICHARD; STUDIES OF WHITE DWARF STARS AND PRE-WHITE DWARF STAR EVOLUTION (AST-8024324 A01); 12 MONTHS \$76,200

MCGRAW, JOHN T.; A DEEP OPTICAL SURVEY FOR GALACTIC AND EXTRAGALACTIC VARIABLES (AST-8100254 A01); 12 MONTHS \$121,000

TOMASKO, MARTIN G.; MODELING OF PLANETARY ATMOSPHERES (AST-8104995 A01); 12 MONTHS \$26,100

LOW, FRANK J.; INFRARED SPATIAL INTERFEROMETRY: A 'PHASED-PHOTOMETER' FOR THE MMT (AST-8108431 A01); 12 MONTHS \$106,200

STRITTMATTER, PETER A. WEYMANN, RAY J. SCOTT, JOHN S. AND GREEN, RICHARD; STUDIES OF QUASI-STAR OBJECTS (AST-8109025); 12 MONTHS \$90,600

BECKERS, JACQUES M. AND HEGE, E K.; EXPERIMENTS IN DIFFERENTIAL SPECKLE INTERFEROMETRY (AST-8113212 A01); 12 MONTHS \$80,000

ANGEL, J R P. AND WEYMANN, RAY J.; COMPLETION OF A LOW AND INTERMEDIATE RESOLUTION SPECTROGRAPH FOR THE MULTIPLE MIRROR TELESCOPE (AST-8116513); 12 MONTHS \$109,900

MCILLAN, ROBERT S.; SEARCH FOR LOW MASS COMPANIONS OF SOLAR-TYPE STARS USING A FABRY-PEROT SPECTROMETER (AST-8117261); 12 MONTHS \$65,000

AARONSON, MARC A.; OBSERVATIONAL STUDIES OF EXTRAGALACTIC OBJECTS (AST-8117365); 12 MONTHS \$54,200

TAPIA, SANTIAGO; ASTRONOMICAL POLARIMETRY (AST-8120261); 12 MONTHS \$64,200

CROMWELL, RICHARD. AND STRITTMATTER, PETER A.; DEVELOPMENT OF PROXIMITY FOCUSED IMAGE INTENSIFIER SYSTEM FOR ASTRONOMICAL APPLICATIONS (AST-8201002); 12 MONTHS \$30,000

BECKERS, JACQUES M.; A PROGRAM TO ENHANCE THE CAPABILITIES OF THE MULTIPLE MIRROR TELESCOPE (AST-8201092); 12 MONTHS \$202,400

STRITTMATTER, PETER A.; SUPPORT FOR ASTRONOMICAL RESEARCH AT STEWARD OBSERVATORY (AST-8201384); 8 MONTHS \$65,000

ARKANSAS

UNIVERSITY OF ARKANSAS, LITTLE ROCK

GRAUER, ALBERT D.; PURCHASE OF EQUIPMENT FOR ASTRONOMICAL DATA REDUCTION (PRM-8113372*); 12 MONTHS \$34,252

CALIFORNIA

CALIFORNIA INSTITUTE OF TECHNOLOGY

MUHLEMAN, DUANE O.; PLANETARY INVESTIGATIONS AT THE OWENS VALLEY RADIO OBSERVATORY (AST-7911806 A03); 12 MONTHS \$49,600

COHEN, MARSHALL H. AND READHEAD, ANTHONY C.; EXTRAGALACTIC RESEARCH AT THE OWENS VALLEY RADIO OBSERVATORY (AST-7913249 A03); 12 MONTHS \$597,700

THORNE, KIP S.; RELATIVISTIC ASTROPHYSICS (AST-7922013 A02); 12 MONTHS \$190,000

SARGENT, WALLACE W. AND LO, KWOK-YUNG; TWENTY-ONE CENTIMETERS HI STUDIES OF GALAXIES AND THEIR ENVIRONMENTS IN NEARBY GROUPS (AST-8002101 A01); 12 MONTHS \$74,600

PHILLIPS, THOMAS G.; MILLIMETER AND SUBMILLIMETER WAVELENGTH SPECTROSCOPY OF INTERSTELLAR GAS (AST-8007645 A02*); 12 MONTHS \$243,600

LEIGHTON, ROBERT B.; MILLIMETER-WAVE ASTRONOMY AT OWENS VALLEY RADIO OBSERVATORY (AST-8016863 A02); 12 MONTHS \$924,000

SOIFER, BARUCH T. AND NEUGEBAUER, GERRY; OBSERVATIONAL PROGRAM IN GROUND-BASED INFRARED ASTRONOMY (AST-8017335 A01); 12 MONTHS \$185,000

BLANDFORD, ROGER D.; THEORETICAL ASTROPHYSICS (AST-8017752 A01); 12 MONTHS \$67,000

GOLDREICH, PETER; THEORETICAL ASTROPHYSICS RESEARCH (AST-8020005 A01); 12 MONTHS \$83,900

SARGENT, WALLACE W.; SUPERNOVAE AND EXTRAGALACTIC RESEARCH (AST-8022279 A01); 12 MONTHS \$96,200

ZIRIN, HAROLD; SOLAR RESEARCH AT OWENS VALLEY RADIO OBSERVATORY (AST-8115969); 12 MONTHS \$79,000

SCHMIDT, MAARTEN; SPECTROSCOPIC OBSERVATIONS OF QUASARS (AST-8117754); 12 MONTHS \$87,600

PHILLIPS, THOMAS G.; A SUBMILLIMETER-WAVE TELESCOPE OBSERVATORY DESIGN STUDY (AST-8119478); 12 MONTHS \$140,000

CALIFORNIA STATE UNIVERSITY, NORTHRIDGE

LAWRENCE, JOHN K. AND CHAPMAN, GARY A.; A COMPARATIVE STUDY OF SUNSPOT MODELS THROUGH MAGNETIC FEATURE OBSERVATIONS (AST-8019777 A01); \$10,100

CHAPMAN, GARY A.; A COMPREHENSIVE STUDY OF SUNSPOT AND ACTIVE REGION ENERGY BALANCE AND THEIR EFFECT ON THE SOLAR CONSTANT (AST-8121863); 12 MONTHS \$39,900

INDIVIDUAL AWARD

PETERSON, RUTH C.; SPECTROSCOPIC ANALYSES OF METAL-POOR STARS IN GLOBULAR CLUSTERS (AST-7925880 A01); 24 MONTHS \$75,200

MISSION RESEARCH CORPORATION

STELLINGWERF, ROBERT F.; STABILITY OF STARS AND CIRCUMSTELLAR FLOW (AST-8211115); 12 MONTHS \$24,000

MONTEREY INSTITUTE FOR RESEARCH IN ASTRONOMY

WEAVER, WILLIAM B. AND IRVINE, CYNTHIA E.; MATCHING FUND GRANT FOR MIRA (MONTEREY INSTITUTE FOR RESEARCH IN ASTRONOMY) CHEWS RIDGE OBSERVATORY (AST-8121654); 12 MONTHS \$30,000

PHYSICAL DYNAMICS INC-BERKELEY RESEARCH ASSOCIATES

SMITH, DEAN F.; MODELS FOR SOLAR FLARE EMISSIONS (AST-8115556); 12 MONTHS \$3,100

SMITH, DEAN F.; PULSAR MAGNETOSPHERES (AST-8120453); 13 MONTHS \$38,100

UNIVERSITY OF CALIFORNIA, BERKELEY

PHILLIPS, JOHN G. AND DAVIS, SUMNER P.; ANALYSIS OF MOLECULAR SPECTRA (AST-7921321 A02); 12 MONTHS \$75,900

MCKEE, C F. ARONS, JONATHAN, AND KNOBLOCH, EDGAR; THERMODYNAMICS OF ASTROPHYSICS (AST-7923243 A02); 15 MONTHS \$123,000

SMOOTH, GEORGE F.; SPECTRUM OF THE COSMIC MICROWAVE BACKGROUND RADIATION (PHY-8015694 A01*); 12 MONTHS \$25,100

SMOOTH, GEORGE F.; SPECTRUM OF THE COSMIC MICROWAVE BACKGROUND RADIATION (ASTROPHYSICS) (PHY-8015694 A02*); \$12,500

HEILES, CARL E.; STUDIES OF THE INTERSTELLAR GAS AND MAGNETIC FIELD (AST-8017060 A01); 12 MONTHS \$122,900

WELCH, WILLIAM J. KING, IVAN R. HEILES, CARL E. MCKEE, C F. AND KUHL, LEONARD V.; A COMPUTER AND PICTURE PROCESSOR FOR ASTRONOMICAL OBSERVATION AT THE UNIVERSITY OF CALIFORNIA, BERKELEY (AST-8019955 A01); 12 MONTHS \$120,000

KUHL, LEONARD V.; OBSERVATIONAL AND THEORETICAL STUDIES OF PRE-MAIN SEQUENCE EVOLUTION (AST-8106094 A01); 12 MONTHS \$68,800

WHITE, SIMON D.; FORMATION OF GALAXIES AND GALAXY CLUSTERS (AST-8114715); 24 MONTHS \$71,500

- WELCH, WILLIAM J; RADIO ASTRONOMICAL STUDIES (AST-8114717; 12 MONTHS \$853,000
 SPINRAD, HYRON; OBSERVATIONAL COSMOLOGY (AST-8116125; 6 MONTHS \$8,200
 SPINRAD, HYRON; QUANTITATIVE SPECTROSCOPY OF COMETS (AST-8116187; 12 MONTHS \$17,200
 DAVIS, MARC; STUDIES OF THE INTERNAL STRUCTURE AND SPACE DISTRIBUTION OF GALAXIES AND CLUSTERS OF GALAXIES (AST-8118537; 12 MONTHS \$57,200

UNIVERSITY OF CALIFORNIA, LOS ANGELES

- ALLER, LAWRENCE H; THE COMPOSITION OF GASEOUS NEBULAE (AST-8019436 A01; 12 MONTHS \$63,900
 ULRICH, ROGER K; RESEARCH INTO THE THEORY OF STELLAR STRUCTURE AND EVOLUTION (AST-8019745 A01; 12 MONTHS \$73,000
 PLAVEC, MIROSLAV M. AND POPPER, DANIEL M; INVESTIGATIONS OF CLOSE BINARY STARS (AST-8200046; 12 MONTHS \$95,000

UNIVERSITY OF CALIFORNIA, SAN DIEGO

- BURBIDGE, E MARGARE, AND SMITH, HARDING E; EXTERNAL GALAXIES AND QUASI-STEELAR OBJECTS (AST-7922032 A03; 12 MONTHS \$176,000
 MENDIS, D ASOKA; A THEORETICAL INVESTIGATION OF THE COMPOSITION AND STRUCTURE OF COMETS (AST-8108706 A01; 12 MONTHS \$33,000
 JONES, BARBARA; INFRARED RESEARCH IN ASTROPHYSICS (AST-8114471; 12 MONTHS \$75,000

UNIVERSITY OF CALIFORNIA, SANTA CRUZ-LICK OBSERVATORY

- ROBINSON, LLOYD B, BODENHEIMER, PETER H, MILLER, JOSEPH S, AND WOOSLEY, STANFORD E; A COMPUTER FOR DATA ANALYSIS AND THEORETICAL CALCULATIONS AT LICK OBSERVATORY (AST-8017054 A01; 12 MONTHS \$178,400
 BODENHEIMER, PETER H, AND LIN, DOUGLAS N; THEORETICAL COSMOLOGY (AST-8100163 A01; 12 MONTHS \$36,200
 WOOSLEY, STANFORD E; THEORETICAL HIGH ENERGY ASTROPHYSICS (AST-8108509 A01; 12 MONTHS \$71,900
 MILLER, JOSEPH S, ROBINSON, LLOYD B, VOGT, STEVEN S, AND RANK, DAVID M; DEVELOPMENT OF CCD INSTRUMENTATION FOR ASTRONOMICAL RESEARCH AT LICK OBSERVATORY (AST-8120960; 4 MONTHS \$100,000
 HERBIG, GEORGE H; PRE-MAIN SEQUENCE STARS, HERBIG-HARO OBJECTS AND HIGH-RESOLUTION STUDIES OF INTERSTELLAR MATERIAL (AST-8203115; 24 MONTHS \$118,700

UNIVERSITY OF CALIFORNIA, SANTA CRUZ

- OSTERBROCK, DONALD E; STUDIES OF IONIZED GAS IN GALAXIES, QUASARS AND NEBULAE (AST-7919227 A02; 12 MONTHS \$80,800
 KLEMOLA, ARNOLD R; STELLAR PROPER MOTIONS AND PARALLAXES (AST-8112347; 12 MONTHS \$104,100

UNIVERSITY OF SOUTHERN CALIFORNIA

- KUMAR, SHAILENDR; THEORETICAL INVESTIGATION OF THE ATMOSPHERES OF THE GALLILEAN SATELLITES (AST-8200707; 24 MONTHS \$71,200

COLORADO

NATIONAL CENTER FOR ATMOSPHERIC RESEARCH

- WHITE, ROBERT M; OPERATION, MAINTENANCE AND MANAGEMENT OF THE NATIONAL CENTER FOR ATMOSPHERIC RESEARCH AND THE NATIONAL SCIENTIFIC BALLOON FACILITY (ATM-7733757 AB4; 5; \$5,000

UNIVERSITY OF COLORADO AT BOULDER

- HUMMER, DAVID G; STUDIES OF STELLAR WINDS: DYNAMICS AND RADIATION TRANSFER (AST-8019874 A02; 12 MONTHS \$63,700
 CONTI, PETER S; SPECTROSCOPIC STUDIES OF O-TYPE AND WOLF-RAYET (WR) TYPE STARS (AST-8117357; 12 MONTHS \$73,200
 COX, JOHN P. AND HANSEN, CARL J; BASIC RESEARCH IN THE FIELD OF STELLAR STRUCTURE AND EVOLUTION (AST-8117486; 12 MONTHS \$89,700
 AYRES, THOMAS R; SEMIEMPIRICAL MODELING OF INHOMOGENEOUS STELLAR OUTER ATMOSPHERES (AST-8204450; 24 MONTHS \$66,400
 TIMOTHY, J GETHYN; A PROGRAM OF HIGH-RESOLUTION AND LOW-RESOLUTION ASTRONOMICAL SPECTROSCOPY USING THE MULTI-ANODE MICROCHANNEL ARRAY DETECTOR SYSTEMS (AST-8204094; 12 MONTHS \$70,000
 COX, JOHN P; CONFERENCE: PULSATIONS IN CLASSICAL AND CATAclysmic VARIABLE STARS, BOULDER, COLORADO, JUNE 1 - 4, 1982 (AST-8207450; 12 MONTHS \$8,500

CONNECTICUT

WESLEYAN UNIVERSITY

- UPGREN, ARTHUR R; OBJECTIVE PRISM RADIAL VELOCITIES OF STARS (INT-8115142; 24 MONTHS \$17,533
 UPGREN, ARTHUR R; MEASUREMENT OF PARALLAXES AND PROPER MOTIONS (AST-8121463; 12 MONTHS \$58,300
 HERBST, WILLIAM; OPTICAL AND INFRARED STUDIES OF YOUNG STARS (AST-8121918; 24 MONTHS \$31,000

YALE UNIVERSITY

- VAN ALTENA, WILLIAM F; ASTROMETRIC RESEARCH AT YALE UNIVERSITY OBSERVATORY (AST-8012785 A03; \$6,100
 VAN ALTENA, WILLIAM F; ASTROMETRIC RESEARCH AT YALE UNIVERSITY OBSERVATORY (AST-8012785 A04; \$9,800
 VAN ALTENA, WILLIAM F; ASTROMETRIC RESEARCH AT YALE UNIVERSITY OBSERVATORY (AST-8012785 A05; 12 MONTHS \$120,000

- LARSON, RICHARD B, AND OEMLER, AUGUSTUS A; GALACTIC EVOLUTION AND RELATED STUDIES (AST-8023351 A02; 12 MONTHS \$50,800
 DEMARQUE, PIERRE; RESEARCH IN STELLAR EVOLUTION (AST-8023745 A01; 12 MONTHS \$84,800
 VAN ALTENA, WILLIAM F, AND HOFFLEIT, DORRIT; A SUPPLEMENT TO THE BRIGHT STAR CATALOGUE (AST-8116517; 12 MONTHS \$69,200
 OEMLER, AUGUSTUS A; THE FORMATION AND EVOLUTION OF GALAXIES (AST-8119986; 24 MONTHS \$52,800

DELAWARE

UNIVERSITY OF DELAWARE

- SHIPMAN, HARRY L; LATE STAGES OF STELLAR EVOLUTION (AST-8115095; 24 MONTHS \$86,500

DISTRICT OF COLUMBIA

CARNEGIE INSTITUTION OF WASHINGTON

- SANDAGE, ALLAN R; THE MOTIONS OF OLD SUBDWARF STARS IN THE GALACTIC DISK AND HALO (AST-8015797 A01; 12 MONTHS \$60,000
 HOWARD, ROBERT; SOLAR MAGNETIC AND VELOCITY FIELDS (AST-8020445 A01; 12 MONTHS \$77,400
 LEE, TYPHOON; TRACING THE NUCLEAR ASTROPHYSICAL ORIGIN OF SOLAR SYSTEM MATTER: A LABORATORY STUDY OF ISOTOPIC ANOMALIES (AST-8115972; 24 MONTHS \$41,600
 PERSSON, SVEN E; INFRARED ASTRONOMY (AST-8118196; 12 MONTHS \$49,100

- VAUGHAN, ARTHUR H, AND PRESTON, GEORGE W; CHROMOSPHERIC VARIATIONS IN MAIN SEQUENCE STARS (AST-8121726; 12 MONTHS \$80,400

HOWARD UNIVERSITY

- KUMAR, CIDAMBI K; DIFFUSE INTERSTELLAR LINES IN LOW COLOR EXCESS STARS (AST-8115248; 12 MONTHS \$14,700

NATIONAL ACADEMY OF SCIENCES

- GREGORY, BRUCE N; A STUDY OF THE NEEDS OF ASTRONOMY AND ASTROPHYSICS FOR THE 1980'S (297-7828089 A07; \$9,650
 DOW, RICHARD Y; SUPPORT OF THE COMMITTEE ON RADIO FREQUENCIES (AST-8108951 A01; 12 MONTHS \$30,000

NATIONAL ACADEMY OF SCIENCES-NATIONAL RESEARCH COUNCIL

- DYER, EDWARD R; TRAVEL GRANT FOR U.S. PARTICIPATION IN THE 18TH GENERAL ASSEMBLY OF THE INTERNATIONAL ASTRONOMICAL UNION AND ASSOCIATED SYMPOSIA AND COLLOQUIA, MAR 1 1982 - FEB 28 1983 (02T-8205550; 12 MONTHS \$45,000

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

- BRUNK, WILLIAM E; NSF PORTION OF VISITOR SUPPORT COSTS FOR THE INFRARED TELESCOPE FACILITY (IRTF) (AST-8112100 A01; 12 MONTHS \$60,000

FLORIDA

UNIVERSITY OF FLORIDA

- HOOPER, CHARLES F; STUDIES IN DYNAMIC STELLAR EVOLUTION (AST-7920024 A01; 24 MONTHS \$90,900
 HUNTER, JAMES H, AND GOTTESMAN, STEPHEN T; HIGH RESOLUTION OBSERVATIONS AND DYNAMICAL MODELS OF THE HI CONTENT OF BARRED SPIRAL GALAXIES (AST-8116312; 24 MONTHS \$79,600
 WILSON, ROBERT E; STUDIES OF BINARIES IN TRANSIENT STAGES OF EVOLUTION (AST-8203700; 12 MONTHS \$25,550
 SMITH, ALEX G; MEASUREMENT AND ANALYSIS OF VARIABLE PLANETARY AND EXTRAGALACTIC EMISSIONS AT RADIO AND OPTICAL FREQUENCIES (AST-8204926; 12 MONTHS \$135,600

GEORGIA

GEORGIA STATE UNIVERSITY

- MCALISTER, HAROLD A; BINARY STAR SPECKLE INTERFEROMETRY (AST-8015781 A01; 12 MONTHS \$36,200

HAWAII

UNIVERSITY OF HAWAII-MANOA

- MCCORD, THOMAS B; A TWO-DIMENSIONAL LOW LIGHT LEVEL DETECTOR SYSTEM FOR MAUNA OBSERVATORY (AST-7924610 A01; 12 MONTHS \$83,000
 WOLFF, SIDNEY C; THE B-TYPE STARS AND THE ORIGIN OF THE ELEMENTS (AST-7927154 A01; 24 MONTHS \$59,900
 LANDMAN, DONALD A; PROTON EXCITATION OF CORONAL AND TRANSITION REGION IONS (AST-8000695 A02; \$4,800
 STOCKTON, ALAN N; THE ENVIRONMENTS OF QUASI-STEELAR OBJECTS (AST-8022203 A01; 12 MONTHS \$56,800
 LANDMAN, DONALD A; OBSERVATIONAL STUDIES OF THE SPECTROPHOTOMETRY OF QUIESCENT SOLAR PROMINENCES (AST-8116311; 12 MONTHS \$28,400
 FILCHER, CARL B; STUDIES OF THE OPTICALLY EMITTING COMPONENTS OF THE JOVIAN MAGNETOSPHERE (AST-8200600; 12 MONTHS \$50,200
 TULLY, R BRENT; STRUCTURE IN THE DISTRIBUTION OF GALAXIES (AST-8203971; 12 MONTHS \$48,600

ILLINOIS

NORTHWESTERN UNIVERSITY

- TAAM, RONALD; NUCLEAR FUSION IN ACCRETING NEUTRON STARS AND WHITE DWARF STARS (AST-8109826; 24 MONTHS \$40,100

ANDERSON, CHRISTOPH M; *THE MIDWESTERN ASTRONOMICAL DATA REDUCTION AND ANALYSIS FACILITY* (AST-8121099); 12 MONTHS \$85,800

UNIVERSITY OF CHICAGO

ARNETT, W D; *THEORETICAL ASTROPHYSICS AND NUCLEAR ASTROPHYSICS* (AST-8022876 A02); 12 MONTHS \$103,900
OKA, TAKESHI; *INFRARED SPECTROSCOPY OF MOLECULAR IONS* (PHY-8113097 A01*); \$50,000

SCHRAMM, DAVID N; *NUCLEAR AND ELEMENTARY PARTICLE ASTROPHYSICS AND THE ORIGIN OF THE ELEMENTS* (AST-8116750); 12 MONTHS \$96,500

HILDEBRAND, ROGER H, AND JAFFE, DANIEL; *SUBMILLIMETER ASTRONOMY* (AST-8117134); 12 MONTHS \$38,000

KRON, RICHARD G; *STUDIES OF COMPLETE SAMPLE OF VERY FAINT ASTRONOMICAL OBJECTS* (AST-8121653); 12 MONTHS \$48,200

UNIVERSITY OF ILLINOIS AT URBANA

TRURAN, JAMES W; *THEORETICAL RESEARCH IN NUCLEAR ASTROPHYSICS* (AST-8018198 A01); 12 MONTHS \$92,200

WATSON, WILLIAM D; *THEORY OF DIFFUSE MATTER IN ASTROPHYSICS* (AST-8023230 A01); 12 MONTHS \$86,000

CRUTCHER, RICHARD M; *RADIO AND OPTICAL STUDIES OF INTERSTELLAR CLOUDS* (AST-8114887); 36 MONTHS \$72,900

IBEN, ICKO; *STUDIES IN STELLAR STRUCTURE AND EVOLUTION* (AST-8115325); 12 MONTHS \$105,400

INDIANA

INDIANA UNIVERSITY, BLOOMINGTON

HONEYCUTT, R KENT; *THE STRUCTURE OF ACCRETION DISKS ON ALGOL-TYPE BINARIES* (AST-8108712 A01); 12 MONTHS \$51,700

DURISEN, RICHARD H; *THE DYNAMICS AND STABILITY OF ROTATING STARS AND GAS DISKS* (AST-8120367); 24 MONTHS \$66,100

HONEYCUTT, R KENT; *ATMOSPHERES OF COOL STARS* (AST-8205800); 24 MONTHS \$73,100

PURDUE UNIVERSITY

MOFFETT, THOMAS J; *CEPHEID DISTANCES AND RADII FROM SIMULTANEOUS LIGHT AND VELOCITY OBSERVATIONS: A JOINT PROJECT BETWEEN THE UNIVERSITY OF TEXAS AT AUSTIN AND PURDUE UNIVERSITY* (AST-7919913 A01); 24 MONTHS \$33,600

IOWA

UNIVERSITY OF IOWA

FIX, JOHN D; *HYDROXYL MASERS AND THE STRUCTURE OF LONG PERIOD VARIABLE CIRCUMSTELLAR MASS FLOW* (AST-7925076 A01); 2 MONTHS \$1,700

MUTEL, ROBERT L; *VERY LONG BASELINE INTERFEROMETRY AT NORTH LIBERTY RADIO OBSERVATORY* (AST-8118337); 12 MONTHS \$65,900

KANSAS

UNIVERSITY OF KANSAS MAIN CAMPUS

SHAWL, STEPHEN J; *STUDIES OF FUNDAMENTAL PROPERTIES OF GLOBULAR CLUSTERS IN THE MILKY WAY GALAXY* (AST-8000001 A01*); 24 MONTHS \$47,500

KENTUCKY

UNIVERSITY OF KENTUCKY

ELITZUR, MOSHE; *THEORETICAL ASTROPHYSICS RESEARCH ON STELLAR MASERS* (AST-8023712 A01); 12 MONTHS \$14,300

MARYLAND

INDIVIDUAL AWARD

FEKEL, FRANCIS C; *INDIVIDUAL AND COLLECTIVE PROPERTIES OF CLOSE MULTIPLE SYSTEMS* (AST-8116409); 12 MONTHS \$33,000

UNIVERSITY OF MARYLAND, COLLEGE PARK

ERICKSON, WILLIAM C, AND KUNDU, MUKUL R; *OPERATION OF THE CLARK LAKE RADIO TELESCOPE* (AST-8108501 A01); 12 MONTHS \$399,300

ERICKSON, WILLIAM C; *STUDY OF THE IMPACT OF ITU ADMINISTRATIVE RADIO CONFERENCES UPON FREQUENCY PROTECTION FOR SCIENTIFIC RESEARCH* (AST-8213286); 8 MONTHS \$14,900

MASSACHUSETTS

ATMOSPHERIC AND ENVIRONMENTAL RESEARCH INC

FOUKAL, PETER V; *THE DYNAMICS OF SOLAR CONVECTION* (AST-8203404); 12 MONTHS \$71,900

BOSTON UNIVERSITY

BRECHER, KENNETH; *THEORETICAL ASTROPHYSICS AND COSMOLOGY* (AST-8020756 A01); 12 MONTHS \$27,000

HARVARD UNIVERSITY

LILLER, WILLIAM, AND GRINDLAY, JONATHAN E; *OPTICAL STUDIES OF HIGHLY ENERGETIC ASTRONOMICAL SOURCES* (AST-7823814 A02); 12 MONTHS \$50,000

BALL, JOHN A; *VERY LONG BASELINE INTERFEROMETRY AT THE HARVARD RADIO ASTRONOMY STATION* (AST-8012712 A01); 12 MONTHS \$105,900

DALGARNO, ALEXANDER; *THEORETICAL STUDIES OF INTERSTELLAR MATTER* (AST-8114718); 12 MONTHS \$62,900

PARKINSON, WILLIAM H; *LABORATORY MEASUREMENTS OF BASIC ATOMIC DATA FOR ASTRONOMY* (AST-8116438); 12 MONTHS \$76,200

HARVARD UNIVERSITY-OBSERVATORY

LILLER, MARTHA H; *SOUTHERN HEMISPHERE SKY PATROL* (AST-7820134 A04); 12 MONTHS \$23,100

CAMERON, A G W; *THEORETICAL STUDIES IN NUCLEAR SYNTHESIS AND ASTROPHYSICS* (AST-8119545); 24 MONTHS \$115,900

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

STAEHLIN, DAVID H, AND SHAO, MICHAEL; *STELLAR OBSERVATIONS WITH THE MARK II ASTROMETRIC INTERFEROMETER* (AST-7919553 A03); 12 MONTHS \$79,500

SHAPIRO, IRWIN I, AND COUNSELMAN, CHARLES C; *VLBI ASTROMETRY* (AST-8022229 A01); 12 MONTHS \$71,500

BURKE, BERNARD F; *GALACTIC AND EXTRAGALACTIC RADIO ASTRONOMY* (AST-8022864 A01); 12 MONTHS \$190,000

MCCLINTOCK, JEFFREY E; *OPTICAL OBSERVATIONS OF GALACTIC X-RAY SOURCES* (AST-8115557); 12 MONTHS \$64,100

COWIE, LENNOX L, TREMAINE, SCOTT D, AND ALCOCK, CHARLES; *THEORETICAL DYNAMICS OF STARS AND GAS IN THE GALAXY* (AST-8120765); 12 MONTHS \$33,300

BARRETT, ALAN H, AND MYERS, PHILIP C; *RADIO OBSERVATIONS OF INTERSTELLAR MOLECULES* (AST-8121416); 12 MONTHS \$143,800

DREHER, JOHN W; *STUDIES OF EXTRAGALACTIC RADIO SOURCES* (AST-8210996); 12 MONTHS \$20,300

NORTHEAST RADIO OBSERVATORY CORPORATION

EVANS, JOHN V; *RADIO ASTRONOMY OPERATIONS AND INSTRUMENTATION AT THE HAYSTACK OBSERVATORY* (AST-7920168 A03); 12 MONTHS \$1,015,000

UNIVERSITY OF MASSACHUSETTS, AMHERST

HUGUENIN, G RICHARD; *ASTRONOMY RESEARCH AT THE FIVE COLLEGE RADIO ASTRONOMY OBSERVATORY* (AST-7919821 A03*); 12 MONTHS \$850,000

WILLIAMS COLLEGE

PASACHOFF, JAY M; *ACQUISITION OF SOLAR INSTRUMENTATION FOR ECLIPSE STUDIES OF CORONAL HEATING* (PRM-8114631*); 12 MONTHS \$8,300

MICHIGAN

MICHIGAN STATE UNIVERSITY

LINNELL, ALBERT P; *A STUDY OF THE CLOSE BINARY SYSTEM VW CEPHEI* (AST-8002116 A02*); \$1,500

SIMKIN, SUSAN M; *DISK STRUCTURE AND NUCLEAR ACTIVITY IN SEYFERT GALAXIES* (AST-8120133); 12 MONTHS \$8,500

UNIVERSITY OF MICHIGAN-ANN ARBOR

ALLER, HUGH D, AND ALLER, MARGO F; *RADIO POLARIZATION AND SPECTRA OF ACTIVE EXTRAGALACTIC OBJECTS* (AST-8021250 A01); 12 MONTHS \$134,100

RICHSTONE, DOUGLAS O, AND KIRSHNER, ROBERT P; *DYNAMICS OF STARS IN GALAXIES AND GALAXIES IN CLUSTERS* (AST-8102930); 24 MONTHS \$90,000

HILTNER, WILLIAM A, KIRSHNER, ROBERT P, MOOK, DELO E, BOLEY, FORREST I, AND CANIZARES, CLAUDE R; *CONSTRUCTION OF A 24 METER TELESCOPE FOR THE MCGRAW-HILL* (AST-8120418); 12 MONTHS \$90,000

MAC ALPINE, GORDON M; *STUDIES OF QUASARS, EMISSION-LINE GALAXIES, AND SELECTED SUPERNOVA REMNANTS* (AST-8204215); 24 MONTHS \$50,300

MINNESOTA

UNIVERSITY OF MINNESOTA

STEIN, WAYNE A, AND NEY, EDWARD F; *RESEARCH IN INFRARED ASTRONOMY* (AST-8015307 A01); 12 MONTHS \$233,900

KENNICUTT, ROBERT; *STUDIES OF IONIZED GAS AND STAR FORMATION IN GALAXIES* (AST-8111711); 24 MONTHS \$39,000

JONES, THOMAS W, AND RUDNICK, LAWRENCE; *OBSERVATIONAL AND THEORETICAL STUDIES OF ACTIVE EXTRAGALACTIC SOURCES* (AST-8114737); 24 MONTHS \$109,300

UNIVERSITY OF MINNESOTA AT SAINT PAUL

HUMPHREYS, ROBERTA M, AND LANZAU, ROBERT; *REDEVELOPMENT OF THE AUTOMATED PLATE SCANNER AT THE UNIVERSITY OF MINNESOTA* (AST-7920382 A02); 12 MONTHS \$143,400

MISSOURI

UNIVERSITY OF MISSOURI, ST LOUIS

SCHWARTZ, RICHARD D; *OBSERVATIONAL AND THEORETICAL STUDIES OF HERBIG-HARO OBJECTS* (AST-8201430); 24 MONTHS \$36,400

WASHINGTON UNIVERSITY

SMITH, WILLIAM H; *LABORATORY STUDIES OF MOLECULES AND MOLECULAR IONS OF ASTROPHYSICAL INTEREST* (AST-8019977 A01); 12 MONTHS \$100,700

SMITH, WILLIAM H; *A VARIABLE BAND WIDTH TUNABLE FILTER AND AN ARRAY DETECTOR FOR USE IN GROUND-BASED ASTRONOMY* (AST-8103237); 12 MONTHS \$100,000

KATZ, JONATHAN I; *RESEARCH IN THEORETICAL HIGH ENERGY ASTROPHYSICS* (AST-8121704); 24 MONTHS \$79,400

NEW JERSEY

INSTITUTE FOR ADVANCED STUDY

ADLER, STEPHEN L. BAHCALL, JOHN N. AND DASHEN, ROGER F. PURCHASE AND OPERATION OF A COMPUTER FOR RESEARCH IN ASTROPHYSICS AND HIGH ENERGY PHYSICS (PHY-8009817 A01*); 12 MONTHS \$26,590

PRINCETON UNIVERSITY

GUNN, JAMES E. STUDIES IN COSMOLOGY AND THE EVOLUTION AND DYNAMICS OF GALAXIES AND CLUSTERS (AST-8015346 A01*); 12 MONTHS \$110,000

OSTRIKER, JEREMIAH P. FORMATION OF RELATIVISTIC JETS IN THICK ACCRETION DISCS (AST-8022521 A01*); 24 MONTHS \$24,900

OSTRIKER, JEREMIAH P. HYDRODYNAMICAL PROCESSES IN HIGH ENERGY ASTROPHYSICS (AST-8022785 A01*); 12 MONTHS \$88,000

TAYLOR, JOSEPH H. RADIO OBSERVATIONS OF PULSARS (AST-8103190 A01*); 12 MONTHS \$61,900

GUNN, JAMES E. ASTRONOMICAL USE OF CHARGE COUPLED DEVICES (AST-8119333); 18 MONTHS \$83,000

SCHWARZSCHILD, MARTIN. STUDIES ON THE DYNAMICS OF GALAXIES (AST-8121485); 12 MONTHS \$44,600

NEW YORK

COLUMBIA UNIVERSITY

THADDEUS, PATRICK, AND COHEN, RICHARD. A SMALL MILLIMETER WAVE TELESCOPE TO SURVEY MOLECULAR CLOUDS IN THE SOUTHERN HEMISPHERE (AST-8024657 A01*); 12 MONTHS \$371,400

SCHARLEMANN, ERNST T. THEORETICAL STUDIES OF ACCRETION ONTO BLACK HOLES AND OF TIDES IN BINARY STARS (AST-8105063 A01*); 24 MONTHS \$46,500

MORRIS, MARK. STUDIES OF BIPOLAR NEBULAE AND GALACTIC CENTER CLOUDS (AST-8114716*); 12 MONTHS \$27,700

LUCY, LEON B. STUDIES IN STELLAR ASTRONOMY (AST-8115971); 24 MONTHS \$118,800

CORNELL UNIVERSITY

SHAPIRO, STUART L. THEORETICAL STUDIES IN ASTROPHYSICS (AST-8116370); 12 MONTHS \$210,000

RENSSELAER POLYTECHNIC INSTITUTE

RYDGREN, A. ERIC. FURTHER STUDY OF THE CIRCUMSTELLAR DUST ASSOCIATED WITH T TAURI STARS (AST-8018329 A01*); 12 MONTHS \$22,400

KUTNER, MARC L. A PROGRAM OF OBSERVATIONS OF INTERSTELLAR MOLECULES (AST-8120900); 24 MONTHS \$49,300

STATE UNIVERSITY AT STONY BROOK

PETERSON, DEANE M. OBSERVATIONS OF HYADES AND PRAESEPE BINARIES (AST-8115245); 12 MONTHS \$26,600

SIMON, MICHAEL. OBSERVATIONS OF OBJECTS OF THE BECKLIN-NEUGEBAUER TYPE. H₂ EMISSION IN MOLECULAR CLOUDS AND THE DUST EXTINCTION LAW IN MOLECULAR CLOUDS (AST-8116049); 24 MONTHS \$38,000

UNIVERSITY OF ROCHESTER

VAN HORN, HUGH M. STUDIES OF DEGENERATE STARS (AST-8111460 A01*); 12 MONTHS \$76,500

NORTH CAROLINA

DUKE UNIVERSITY

HERBST, ERIC. INTERSTELLAR ASTRO-CHEMISTRY (AST-8020321 A01*); 24 MONTHS \$28,800

UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL

CARNEY, BRUCE W. THE AGES AND METALLICITY GRADIENT OF POPULATION II STARS (AST-8111938); 24 MONTHS \$56,700

OHIO

CASE WESTERN RESERVE UNIVERSITY

PESCH, PETER, BIDELMAN, W. P., STEPHENSON, C. B. AND SANDULEAK, NICHOLAS. GALACTIC AND EXTRAGALACTIC RESEARCH WITH THE RELOCATED BURELL SCHMIDT (AST-7921572 A02*); 12 MONTHS \$167,000

PESCH, PETER, BIDELMAN, W. P., SANDULEAK, NICHOLAS, AND STEPHENSON, C. B. OPERATION OF THE BURELL SCHMIDT AT KITT PEAK (AST-8200552*); 36 MONTHS \$117,700

OHIO STATE UNIVERSITY

PETERSON, BRADLEY M. SPECTROSCOPIC STUDIES OF ACTIVE GALAXIES AND QUASI-STELLAR OBJECTS (AST-8117095); 12 MONTHS \$35,600

UNIVERSITY OF TOLEDO

BOPP, BERNARD W. STUDY OF STELLAR SURFACE PHENOMENA (AST-8115098); 24 MONTHS \$68,800

OREGON

UNIVERSITY OF OREGON - EUGENE

MOSELEY, JOHN T. PHOTODISSOCIATION OF IONS OF ASTROPHYSICAL IMPORTANCE (AST-7918371 A02*); 12 MONTHS \$44,500

NOLT, IRA G. NEAR-MILLIMETER PHOTOMETRY OF THE MAJOR PLANETS (AST-8120174); 6 MONTHS \$6,700

KEMP, JAMES C. DATA SYNTHESIS AND PUBLISHING: OPTICAL DATA ON CLOSE BINARIES AND OTHER OBJECTS (AST-8201224); 12 MONTHS \$16,100

PENNSYLVANIA

HAVERFORD COLLEGE

PARTRIDGE, R. B. DETAILED INVESTIGATION OF THE COSMIC MICROWAVE BACKGROUND-IMPLICATIONS FOR COSMOLOGY (AST-8007370 A01*); 12 MONTHS \$10,700

PENNSYLVANIA STATE UNIVERSITY

WEEDMAN, DANIEL W. OBSERVATIONS OF EMISSION-LINE GALAXIES AND QUASARS (AST-8101204); 24 MONTHS \$141,600

RAMSEY, LAWRENCE W. SPECTROSCOPY OF RS CANUM VENATORUM BINARIES AND RELATED OBJECTS (AST-8119790); 24 MONTHS \$78,000

SWARTHMORE COLLEGE

GAUSTAD, JOHN E. AND LIPPINCOTT, SARAH L. ASTROMETRIC STUDY OF NEARBY STARS WITH THE SPROUL 61-CM REFRACTOR (AST-8017320 A01*); 12 MONTHS \$76,100

UNIVERSITY OF PENNSYLVANIA

LANDE, KENNETH. LONG RANGE NEUTRINO DETECTOR (AST-8119701); 12 MONTHS \$49,300

UNIVERSITY OF PITTSBURGH

WOLFE, ARTHUR M. AND BRIGGS, FRANK H. QUASAR INVESTIGATIONS OF THE UNIVERSE AT LARGE REDSHIFTS (AST-8109445); 12 MONTHS \$73,600

GATEWOOD, GEORGE D. THE ALLEGHENY OBSERVATORY TRIGONOMETRIC PARALLAX PROGRAM (AST-8110507 A01*); 12 MONTHS \$130,000

TEXAS

UNIV OF TEXAS AT AUSTIN-MCDONALD OBSERVATORY

BARNES, THOMAS G. CEPHEID DISTANCES AND RADII FROM SIMULTANEOUS LIGHT AND VELOCITY OBSERVATIONS. A JOINT PROJECT BETWEEN THE UNIVERSITY OF TEXAS AT AUSTIN AND PURDUE UNIVERSITY (AST-7919826 A01*); 24 MONTHS \$34,000

UNIV OF TEXAS AT AUSTIN

MULHOLLAND, J. D. HIGH RESOLUTION STUDY OF PLUTO/CHARON AND OTHER MINOR BINARY OBJECTS IN THE SOLAR SYSTEM (AST-7924550 A02*); 24 MONTHS \$70,900

SCALO, JOHN M. RED GIANT STARS (AST-8019737 A01*); 12 MONTHS \$28,500

EVANS, DAVID S. PHOTOELECTRIC OBSERVATION OF LUNAR OCCULTATIONS (AST-8106063 A01*); 12 MONTHS \$61,000

DE VAUCOLEURS, G. AND CORWIN, H. G. SOUTHERN HEMISPHERE GALAXY CATALOGUE (AST-8111708); 12 MONTHS \$64,700

VANDEN BOUT, PAUL A. BASH, FRANK N. DAVIS, JOHN H. EVANS, NEAL J. AND VOGEL, WOLFHARD J. SPECTRAL LINE STUDIES OF GALACTIC MOLECULAR CLOUDS (AST-8116403); 12 MONTHS \$400,000

LAMBERT, DAVID L. STELLAR SPECTROSCOPY AND NUCLEOSYNTHESIS (AST-8117485); 12 MONTHS \$75,000

WHEELER, J. CRAIG. THEORETICAL STUDIES OF SUPERNOVAE AND OF STELLAR PULSATION (AST-8201210); 12 MONTHS \$49,400

UTAH

UNIVERSITY OF UTAH

GROOM, DONALD E. MEASUREMENT OF THE COSMIC RAY SIDEREAL ANISOTROPY ABOVE 1 TEV (AST-8010727 A01*); 12 MONTHS \$33,100

UTAH RESEARCH INSTITUTE

SHORTHILL, RICHARD W. FAINT OBJECT STUDY (0.4 TO 1 UM): IRREGULAR SATELLITES, TROJAN ASTEROIDS, AND OTHER UNUSUAL MINOR PLANETS (AST-8116773*); 12 MONTHS \$29,300

VIRGINIA

UNIVERSITY OF VIRGINIA

SARAZIN, CRAIG L. IONIZED GAS IN GALAXIES AND CLUSTERS OF GALAXIES (AST-8120260); 24 MONTHS \$42,000

FREDRICK, LAURENCE W. AND IANNA, PHILIP. PARALLAXES AND PROPER MOTIONS OF SELECTED STARS (AST-8200232*); 12 MONTHS \$92,850

JOHNSON, ROBERT E. AND BORING, JOHN W. EROSION OF CONDENSED GASES BY FAST IONS: PHYSICAL MECHANISMS AND ASTROPHYSICAL IMPLICATIONS (INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH PROJECT) (AST-8200477*); 12 MONTHS \$25,900

ROBERTS, WILLIAM W. GALAXIES. THE INTERSTELLAR MEDIUM, THE EXTERNAL ENVIRONMENT. GALACTIC GAS DYNAMICS AND EVOLUTIONARY SIMULATIONS (AST-8204256); 3 MONTHS \$2,000

VIRGINIA POLYTECHNIC INSTITUTE

DENNISON, BRIAN K. BRODERICK, JOHN J. AND O'DELL, STEPHEN L. LOW-FREQUENCY VARIABILITY IN EXTRAGALACTIC RADIO SOURCES (AST-8117864*); 12 MONTHS \$36,600

WASHINGTON

UNIVERSITY OF WASHINGTON

HODGE, PAUL W. STAR AND CLUSTER EVOLUTION IN THE MAGELLANIC CLOUDS (AST-8102952 A01*); 12 MONTHS \$36,000

WALLERSTEIN, GEORGE. ABUNDANCES OF ELEMENTS AND ISOTOPIES IN THE COOL PECULIAR STARS OF BARIUM, SC AND S TYPES (AST-8118813); 24 MONTHS \$118,600

SZKODY, PAULA. A STUDY OF CATAclysmic VARIABLE STARS (AST-8204488); 24 MONTHS \$63,500

WISCONSIN

UNIVERSITY OF WISCONSIN-MADISON

CHURCHWELL, EDWARD B. OBSERVATIONAL INVESTIGATIONS OF INTERSTELLAR MOLECULES, STAR FORMATION, AND STELLAR MASS LOSS (AST-7905578 A01*); 24 MONTHS \$38,800

ROESLER, FRED L. AND SCHERR, FRANK. HIGH-RESOLUTION SPECTROSCOPIC STUDIES IN AERONOMY (ATM-8021064 A01*); 12 MONTHS \$35,000

ROESLER, FRED L. AND SCHERR, FRANK. INVESTIGATION OF LOW INTENSITY EMISSION LINE FROM THE INTERSTELLAR MEDIUM (AST-8106028); 12 MONTHS \$105,300

MATHIS, JOHN S. THEORETICAL STUDIES OF INTERSTELLAR DUST AND GASEOUS NEBULAE (AST-8117972); 24 MONTHS \$51,000

CASSINELLI, JOSEPH P., MATHIS, JOHN S. AND SAVAGE, BLAIR D. STUDIES OF THE CENTRAL OBJECT OF THE 30 DORADUS NEBULA (AST-8118814); 12 MONTHS \$45,000

WYOMING

UNIVERSITY OF WYOMING

HACKWELL, JOHN A., GRASDALEN, GARY L. AND GEHRZ, ROBERT D. INFRARED OBSERVATIONS AT THE WYOMING INFRARED OBSERVATORY (AST-8021349 A02); 12 MONTHS \$121,400

GEHRZ, ROBERT D., HACKWELL, JOHN A., GRASDALEN, GARY L. AND JOHNSON, PAUL E. DEVELOPMENT OF DETECTION SYSTEMS FOR THE WYOMING INFRARED OBSERVATORY (AST-8203036); 12 MONTHS \$119,900

ARCTIC RESEARCH

ALASKA

UNIVERSITY OF ALASKA FAIRBANKS CAMPUS-GEOPHYSICAL INSTITUTE

OSTERKAMP, THOMAS E. AND HARRISON, WILLIAM D. HEAT AND MASS TRANSPORT IN SUBSEA PERMAFROST (DPP-7728451 A04); 12 MONTHS \$89,000

BENSON, CARL S. GLACIER FACIES AND STRUCTURE OF THE NEAR SURFACE LAYERS OF THE GREENLAND ICE SHEET (DPP-7926425 A02); 12 MONTHS \$67,285

JAYAWEEERA, KOLF, AND OHTAKE, TAKESHI. ARCTIC STRATUS CLOUD EXPERIMENT - ANALYSIS OF CLOUD PHYSICS AND METEOROLOGICAL DATA (DPP-8111512); 12 MONTHS \$73,741

SWIFT, DANIEL W. THEORETICAL STUDIES OF CONVECTIVE AND DIFFUSIVE MASS TRANSPORT OF BRINE IN THE ARCTIC OCEAN SEABED (DPP-8120471); 12 MONTHS \$50,045

UNIVERSITY OF ALASKA FAIRBANKS CAMPUS-INSTITUTE OF MARINE SCIENCE

GOERING, JOHN J. AND MCROY, C. PETER. PROCESSES AND RESOURCES OF THE BERING SEA SHELF (PROBES). PHASE II (DPP-7623340 A09*); 12 MONTHS \$1,520,121

NIEBAUER, HENRY J. AND ALEXANDER, VERA D. DYNAMICS OF AN ICE-EDGE ZONE (OCE-8024058 A01*); 24 MONTHS \$55,360

CALIFORNIA

CALIFORNIA INSTITUTE OF TECHNOLOGY

KAMB, BARCLAY. MEASUREMENT OF BASAL WATER PRESSURE IN A GLACIER SURGE AND OF FLOW AND BASAL CAVITATION AT THE SURGE ONSET AND IN PRECEDING MINI-SURGES (DPP-8309824); 12 MONTHS \$80,782

EARTH SCIENCE RESEARCH CORPORATION

LAMAR, DONALD L. AND REED, W. E. STRUCTURES BEARING ON SENSE AND MAGNITUDE OF DISPLACEMENT AND TECTONIC SIGNIFICANCE OF BILLEFJORDEN FAULT ZONES, SPITSBERGEN, SVALBARD (DPP-8200455); 12 MONTHS \$59,994

POINT REYES BIRD OBSERVATORY

AINLEY, DAVID G. AND WAHL, TERENCE R. DISTRIBUTION OF SEA BIRDS IN THE SUBARCTIC PACIFIC REGION IN RELATION TO PHYSICAL OCEANOGRAPHIC FEATURES (DPP-8204603*); 12 MONTHS \$17,129

SAN JOSE STATE UNIVERSITY

NYBAKKEN, JAMES W. AND OLIVER, JOHN S. WALRUS FEEDING IN THE BERING AND CHUKCHI SEAS (DPP-8121722); 12 MONTHS \$77,179

STANFORD UNIVERSITY

HELLIWELL, ROBERT A. VERY LOW FREQUENCY WAVE INVESTIGATIONS OF THE MAGNETOSPHERE AT ROBERVAL, QUEBEC (DPP-8022540 A01); 12 MONTHS \$226,000

UNIVERSITY OF CALIFORNIA, IRVINE

HUNT, GEORGE L. TROPHIC RELATIONS OF MARINE BIRDS IN THE SOUTHEASTERN BERING SEA (DPP-8308036*); 12 MONTHS \$21,857

UNIVERSITY OF CALIFORNIA, LOS ANGELES

HAMNER, WILLIAM M. THE ECOLOGY OF MACROPLANKTON IN THE BERING SEA FOOD WEB (DPP-8205722); 12 MONTHS \$45,833

UNIVERSITY OF CALIFORNIA, SAN DIEGO-SCRIPPS INSTITUTION OF OCEANOGRAPHY

CRAIG, HARMON. HELIUM, CO₂ AND TRACE GASES IN POLAR ICE CORES (DPP-8019767 A01); 3 MONTHS \$18,800

MICHEL, ROBERT L. TRITIUM DISTRIBUTIONS IN THE ARCTIC SEAS (DPP-8121910); 12 MONTHS \$36,785

COLORADO

UNIVERSITY OF COLORADO AT BOULDER

BRIGGS, WILLIAM M. BASELINE STUDIES ON MODERN OSTRACODES FROM THE SOUTHERN BEAUPORT SEA, ALASKA: A PREREQUISITE TO PALEOENVIRONMENTAL RECONSTRUCTIONS DURING THE QUATERNARY (DPP-8106802); 12 MONTHS \$38,305

MARR, JOHN W. DOCTORAL DISSERTATION RESEARCH: VEGETATION IN THE CENTRAL BROOKS RANGE OF ALASKA (DPP-8106837 A01); \$2,245

MILLER, GIFFORD H. RACEMIZATION-DERIVED GLACIAL AND INTERGLACIAL-AGE PALEOTEMPERATURE GRADIENTS ACROSS N.W. EUROPE (ATM-8109013 A01*); \$9,653

ANDREWS, JOHN T. AND OSTERMAN, LISA. LATE PLEISTOCENE AND HOLOCENE PALEO-OCEANOGRAPHIC CHANGES IN THE NEARSHORE ENVIRONMENT, BAFFIN ISLAND, CANADA: THE GALACIAL/INTERGLACIAL TRANSITION (DPP-8116048); 12 MONTHS \$54,075

SHORT, SUSAN K., WEBBER, PATRICK J. AND ANDREWS, JOHN T. COMPARISONS OF THE MODERN AND HOLOCENE POLLEN RAIN AND HOLOCENE CLIMATIC RECONSTRUCTION BETWEEN NORTHERN ALASKA AND NORTHERN CANADA (DPP-8121774); 12 MONTHS \$62,000

CAINE, T. NELSON, AND KRANTZ, WILLIAM B. TESTING OF A FREE-CONVECTION COMPLIANT-THAW-FRONT MODEL TO EXPLAIN THE REGULARITY OF SORTED PATTERNED GROUND (DPP-8201546); 12 MONTHS \$52,745

ANDREWS, JOHN T. AND MILLER, GIFFORD H. SUPPORT OF A WORKSHOP ON: QUATERNARY GLACIAL EVENTS AND CHRONOLOGY: ARCTIC REGIONS (DPP-8210664); 12 MONTHS \$6,537

DISTRICT OF COLUMBIA

GEORGE WASHINGTON UNIVERSITY

STEPHENS, GEORGE C. IPA MOBILITY ASSIGNMENT (DPP-8210646*); 12 MONTHS \$11,968

NATIONAL ACADEMY OF SCIENCES

HART, PEMBROKE J. SUPPORT OF THE GEOPHYSICS RESEARCH BOARD (GRB) AND THE COMMITTEE ON SOLAR-TERRRESTRIAL RESEARCH (CSTR) (02M-8122148*); 12 MONTHS \$2,750

HUSHEN, TIMOTHY W. SUPPORT FOR THE POLAR RESEARCH BOARD (29P-8207098*); 12 MONTHS \$62,500

NATIONAL ACADEMY OF SCIENCES-NATIONAL RESEARCH COUNCIL

HUSHEN, W. TIMOTHY. SUPPORT OF THE FOURTH INTERNATIONAL CONFERENCE ON PERMAFROST; UNIVERSITY OF ALASKA, FAIRBANKS; JULY 18-23, 1983 (29P-8300216); 24 MONTHS \$10,000

SMITHSONIAN INSTITUTION

LANDRUM, BETTY J. RECORDING OF DATA AND SORTING OF COLLECTIONS FROM POLAR REGIONS (DPP-7413988 A10*); 12 MONTHS \$41,702

FLORIDA

UNIVERSITY OF MIAMI-SCHOOL OF MARINE & ATMOSPHERIC SCIENCES

BRASS, GARRETT W. STUDIES OF FREEZING BRINES USING THE DIFFERENTIAL SCANNING CALORIMETER (DPP-8200840); 12 MONTHS \$21,963

HAWAII

OCEANIC INSTITUTE

BIENFANG, PAUL K. PHYTOPLANKTON SINKING RATES IN SUBARCTIC WATERS (DPP-8121477); 12 MONTHS \$22,493

ILLINOIS

UNIVERSITY OF ILLINOIS AT URBANA

WALSH, JOHN E. NORTH ATLANTIC AND EASTERN ARCTIC OBSERVING SYSTEM STUDIES (DPP-8118543); 12 MONTHS \$71,645

WALSH, JOHN E. A MODEL STUDY OF ANNUAL AND INTERANNUAL FLUCTUATIONS OF ARCTIC SEA ICE (DPP-8120136); 24 MONTHS \$143,305

IOWA

UNIVERSITY OF IOWA

SWETT, KEENE. BIOSTRATIGRAPHIC AND PALEOENVIRONMENTAL COMPARISONS OF UPPER PRECAMBRIAN SEDIMENTARY SUCCESSIONS IN SPITSBERGEN AND CENTRAL EAST GREENLAND (DPP-8019998 A01); 12 MONTHS \$58,664

MAINE

UNIVERSITY OF MAINE, ORONO

KELLOGG, THOMAS B. AND KELLOGG, DAVIDA E. SEDIMENTS DEPOSITED BY MARINE-BASED ICE SHEETS DURING THE LAST GLACIAL MAXIMUM (DPP-8080000 A01*); 12 MONTHS \$30,000

MARYLAND

NATIONAL OCEANIC ATMOSPHERIC ADMINISTRATION

FLEMING, REX J. ARGOS DATA COLLECTION AND LOCATION SURVEY (OCE-8108974 A01*); 12 MONTHS \$6,000

FLEMING, REX J. ARCTIC BASIN BUOY PROGRAM (ATM-8301364*); 12 MONTHS \$10,333

MASSACHUSETTS

MARINE BIOLOGICAL LABORATORY

HOBBIE, JOHN E. AND PETERSON, BRUCE J. ARCTIC LAKE PROCESS STUDIES - A SYNTHESIS (DPP-8102875 A01); 12 MONTHS \$49,653

UNIVERSITY OF MASSACHUSETTS, AMHERST

BRADLEY, RAYMOND S. CLIMATIC FLUCTUATIONS OF NORTHERN MOST NORTH AMERICA (ATM-8017745 A01)*; 12 MONTHS \$25,000

MICHIGAN

UNIVERSITY OF MICHIGAN-ANN ARBOR

OUTCALT, SAMUEL I. DYNAMICS OF GROWTH AND DECAY OF FALSEN AND RELATED FROST MOUNDS IN CENTRAL NORTHERN ALASKA (DPP-8117124); 12 MONTHS \$59,454

WAYNE STATE UNIVERSITY

MORRIS, ALAN P. STRUCTURAL AND METAMORPHIC STUDIES IN THE PRE-CARBONIFEROUS OROGEN OF WESTERN SPITSBERGEN, NORWEGIAN ARCTIC (DPP-8107663 A01); 12 MONTHS \$38,000

MINNESOTA

UNIVERSITY OF MINNESOTA

WRIGHT, HERBERT E. DEGLACIATION AND REFORESTATION OF PARTS OF EASTERN AND CENTRAL CANADA (DPP-8100124 A01); 12 MONTHS \$55,444

UNIVERSITY OF MINNESOTA AT SAINT PAUL

CAHILL, LAURENCE J. MICROPULSATION RESEARCH AT ROBERVAL, QUEBEC, AND AT SIPLE AND SOUTH POLE, ANTARCTICA (DPP-8120957*); 24 MONTHS \$150,000

MISSOURI

ST LOUIS UNIVERSITY

MITCHELL, BRIAN J. RESEARCH ON CRUSTAL STRUCTURE AND SEISMICITY OF THE EASTERN ARCTIC REGIONS IN AND SURROUNDING SPITSBERGEN (DPP-8121478); 12 MONTHS \$75,000

NEBRASKA

UNIVERSITY OF NEBRASKA AT LINCOLN

KUIVINEN, KARL C. COORDINATION OF ICE CORE DRILLING (DPP-7408414 A13); 6 MONTHS \$152,065

KUIVINEN, KARL C. COORDINATION OF ICE CORE DRILLING (DPP-7408414 A14*); 12 MONTHS \$197,927

NEW YORK

COLUMBIA UNIVERSITY-LAMONT-DOHERTY GEOLOGICAL OBSERVATORY

HAYS, JAMES D. CLINE, ROSE M. MC INTYRE, ANDREW, MORLEY, JOSEPH J. AND SHACKLETON, NICHOLAS. PROJECT SPECMAP: MAPPING VARIATIONS IN OCEAN SPECTRA OVER A FREQUENCY RANGE 10⁵ TO 10¹⁰ CYCLES PER YEAR (ATM-8019253 A01)*; 12 MONTHS \$35,000

CORNELL UNIVERSITY

KINTNER, PAUL M. DATA ANALYSIS OF DC AND AC ELECTRIC FIELDS AND MAGNETIC FIELDS IN THE IONOSPHERE ABOVE THE ANT. ARCTIC VLF TRANSMITTER (DPP-8023968 A01)*; 24 MONTHS \$34,000

STATE UNIVERSITY AT ALBANY

HOGAN, AUSTIN W. METEOROLOGICAL VARIATION OF ARCTIC AEROSOL (DPP-8025615 A01); 12 MONTHS \$69,355

STATE UNIVERSITY AT BUFFALO

LANGWAY, CHESTER C. OPERATION OF THE CENTRAL ICE CORE STORAGE FACILITY AND INFORMATION EXCHANGE (DPP-7508512 A08*); 12 MONTHS \$51,798

CALKIN, PARKER E. AND ELLIS, JAMES M. HOLOCENE GLACIATION OF THE BROOKS RANGE, ALASKA (DPP-8020080 A01); 12 MONTHS \$69,000

LANGWAY, CHESTER C. THE GREENLAND ICE SHEET PROGRAM (GISP) ICE CORE STUDIES (DPP-8117750); 12 MONTHS \$315,791

LANGWAY, CHESTER C. THE GREENLAND ICE SHEET PROGRAM (GISP) ICE CORE STUDIES (DPP-8117750 A02); 12 MONTHS \$58,731

OHIO

OHIO STATE UNIVERSITY

WHILLANS, IAN M. DYNAMICS OF THE SOUTHERN PORTION OF THE GREENLAND ICE SHEET (DPP-8008356 A02); 12 MONTHS \$86,622

MOSLEY-THOMPSON, ELLEN; MICROPARTICLE ANALYSIS OF A 50-M ICE CORE FROM MT. WRANGLER, ALASKA (DPP-8018860 A02); \$3,219

EVERETT, KAYE R. SOIL HYDROLOGY AND NUTRIENT DYNAMICS IN TUSsock TUNDRA (DPP-8111887); 12 MONTHS \$59,373

OREGON

OREGON GRADUATE CENTER

RASMUSSEN, REINHOLD A. METHANE AND NITROUS OXIDE IN THE ANCIENT ATMOSPHERE: ANALYSES OF POLAR ICE CORES (DPP-8207470); 12 MONTHS \$42,000

OREGON STATE UNIVERSITY

HEATH, G. ROSS. FIELD AND LABORATORY RECONNAISSANCE OF ARCHEAN ROCKS IN THE WATKIN'S FJORD AREA, KANGERDLUGSSUAQ REGION, EAST GREENLAND (DPP-8120473); 12 MONTHS \$51,177

PENNSYLVANIA

CARNEGIE-MELLON UNIVERSITY

DAVIDSON, CLIFF I. WET AND DRY DEPOSITION OF ATMOSPHERIC TRACE ELEMENTS IN GREENLAND AND IN BARROW, ALASKA (DPP-8020928 A01); \$25,210

RHODE ISLAND

BROWN UNIVERSITY

MATTHEWS, R. K. ARCTIC PALEO-OCEANOGRAPHY: OXYGEN AND CARBON ISOTOPE STUDIES OF FOSSIL FORAMINIFERA AND MOLLUSCS (DPP-8117608); 12 MONTHS \$47,976

SOUTH CAROLINA

UNIVERSITY OF SOUTH CAROLINA AT COLUMBIA

WATTS, DOYLE R. PALEOMAGNETIC STUDY OF DISPLACED TECTONIC PROVINCES IN SVALBARD (DPP-8202345); 12 MONTHS \$22,482

UTAH

UNIVERSITY OF UTAH

BERGER, PATRICIA J. AND NEGUS, NORMAN C. ENVIRONMENTAL CONTROL OF LEMMING REPRODUCTION IN ARCTIC TUNDRA (DPP-8200833); 12 MONTHS \$57,360

UTAH STATE UNIVERSITY

DOUPNIK, JOE R. DIGITAL IONOSPHERE STUDIES OF THE IONOSPHERE FROM SIPLE STATION, ANTARCTICA AND ROBERVAL, QUEBEC (DPP-8100220 A01)*; 12 MONTHS \$170,000

WASHINGTON

SCIENCE APPLICATIONS INC-SCIENCE APPLICATIONS INC-NORTHWEST

HACHMEISTER, LON E. NUMERICAL AND LABORATORY STUDIES OF SEA ICE INTERACTION WITH A STRATIFIED OCEAN (DPP-8208566); 12 MONTHS \$84,149

UNIVERSITY OF WASHINGTON

LACHAPPELLE, EDWARD R. BLUE-GLACIER PROJECT (DPP-7902886 A03); 6 MONTHS \$5,000

UGOLINI, FIORENZO C. DYNAMICS OF SOIL FORMING PROCESSES IN ARCTIC ALASKA (DPP-8005795 A02); 12 MONTHS \$31,014

AAGAARD, KNUT. A STUDY OF THE EURASIAN BASIN OF THE ARCTIC OCEAN (DPP-8100153 A01); 18 MONTHS \$87,300

BRUBAKER, LINDA B. PATTERNS OF LATE-WISCONSIN AND HOLOCENE VEGETATION CHANGE IN NORTHERN INTERIOR ALASKA (DPP-8106806 A02); 12 MONTHS \$78,000

BROWN, ROBERT A. MARGINAL ICE ZONE ATMOSPHERIC BOUNDARY LAYER STUDY (DPP-8121564); 12 MONTHS \$72,084

RAYMOND, CHARLES F. REMOTE SENSING OF INTERNAL AND BASAL HYDRAULIC CONDITIONS IN A SURGE-TYPE GLACIER (DPP-8200725); 12 MONTHS \$94,332

RAYMOND, CHARLES F. REMOTE SENSING OF INTERNAL AND BASAL HYDRAULIC CONDITIONS IN A SURGE-TYPE GLACIER (DPP-8200725 A01); 12 MONTHS \$25,300

WARREN, STEPHEN G. AND WISCOMBE, WARREN J. SOLAR AND INFRARED RADIATION MODELING FOR ICE-COVERED OCEANS (ATM-8206318*); 11 MONTHS \$20,000

WEARN, RICHARD B. PRESSURE MEASUREMENTS IN THE WEST SPITSBERGEN CURRENT (DPP-8210568); 12 MONTHS \$19,925

WISCONSIN

UNIVERSITY OF WISCONSIN-MADISON

HERMAN, GERALD F. NORTH ATLANTIC AND EASTERN ARCTIC OBSERVING SYSTEM STUDIES (DPP-8119155); 12 MONTHS \$73,968

CRADDOCK, CAMPBELL. STRUCTURAL GEOLOGY OF WESTERN SVALBARD (DPP-8203038); 12 MONTHS \$60,035

BENTLEY, CHARLES R. SONIC VELOCITY LOGGING IN THE DEEP DRILL HOLE DYE 3, GREENLAND (DPP-8205614); 12 MONTHS \$46,560

JEZEK, KENNETH C. HIGH FREQUENCY DIELECTRIC PERMITTIVITY OF FIRN AND ICE IN SOUTH CENTRAL GREENLAND (DPP-8210405); 12 MONTHS \$23,737

ASTRONOMY RESEARCH CENTERS

ARIZONA

CERRO TOLOLO INTER-AMERICAN OBSERVATORY

TEEM, JOHN M. CONTRACT FOR THE MANAGEMENT, OPERATION, AND MAINTENANCE OF THE CERRO TOLOLO INTER-AMERICAN OBSERVATORY (CTIO) (AST-7827879 A16); \$3,000,000

TEEM, JOHN M. CONTRACT FOR THE MANAGEMENT, OPERATION, AND MAINTENANCE OF THE CERRO TOLOLO INTER-AMERICAN OBSERVATORY (CTIO) (AST-7827879 A17); \$2,900,000

TEEM, JOHN M. CONTRACT FOR THE MANAGEMENT, OPERATION, AND MAINTENANCE OF THE CERRO TOLOLO INTER-AMERICAN OBSERVATORY (CTIO) (AST-7827879 A18); \$157,000

KITT PEAK NATIONAL OBSERVATORY

TEEM, JOHN M. CONTRACT FOR THE MANAGEMENT, OPERATION, AND MAINTENANCE OF THE KITT PEAK NATIONAL OBSERVATORY (KPNO) (AST-7827880 A43); \$6,000,000

TEEM, JOHN M. CONTRACT FOR THE MANAGEMENT, OPERATION, AND MAINTENANCE OF THE KITT PEAK NATIONAL OBSERVATORY (KPNO) (AST-7827880 A49); \$5,100,000

TEEM, JOHN M. CONTRACT FOR THE MANAGEMENT, OPERATION, AND MAINTENANCE OF THE KITT PEAK NATIONAL OBSERVATORY (KPNO) (29T-7827880 A53); \$13,453

TEEM, JOHN M; CONTRACT FOR THE MANAGEMENT, OPERATION, AND MAINTENANCE OF THE KITT PEAK NATIONAL OBSERVATORY (KPNO) (AST-7827880 A55); \$119,700

NEW MEXICO

SACRAMENTO PEAK OBSERVATORY

TEEM, JOHN M; CONTRACT FOR THE OPERATION, MANAGEMENT, AND MAINTENANCE OF THE SACRAMENTO PEAK OBSERVATORY (SPO) (AST-7817292 A51); \$1,000,000

TEEM, JOHN M; CONTRACT FOR THE OPERATION, MANAGEMENT, AND MAINTENANCE OF THE SACRAMENTO PEAK OBSERVATORY (SPO) (AST-7817292 A54); \$997,017

PUERTO RICO

NATIONAL ASTRONOMY & IONOSPHERE CTR AT ARECIBO

RHODES, FRANK H; CONTRACT FOR THE OPERATION, MANAGEMENT, AND MAINTENANCE OF THE NATIONAL ASTRONOMY AND IONOSPHERE CENTER (NAIC) (AST-8025819 A08); \$2,500,000

RHODES, FRANK H; CONTRACT FOR THE OPERATION, MANAGEMENT, AND MAINTENANCE OF THE NATIONAL ASTRONOMY AND IONOSPHERE CENTER (NAIC) (AST-8025819 A09); \$2,800,000

UTAH

UTAH RESEARCH INSTITUTE

SHORTHILL, RICHARD W; FAINT OBJECT STUDY (0.4 TO 1 UM): IRREGULAR SATELLITES, TROJAN ASTEROIDS, AND OTHER UNUSUAL MINOR PLANETS (AST-8116773*); 12 MONTHS \$10,000

VIRGINIA

VIRGINIA POLYTECHNIC INSTITUTE

DENNISON, BRIAN K, BRODERICK, JOHN J, AND O'DELL, STEPHEN L; LOW-FREQUENCY VARIABILITY IN EXTRAGALACTIC RADIO SOURCES (AST-8117864*); 12 MONTHS \$10,000

WEST VIRGINIA

NATIONAL RADIO ASTRONOMY OBSERVATORY

HUGHES, ROBERT E; CONTRACT FOR THE OPERATION, MANAGEMENT, AND MAINTENANCE OF THE NATIONAL RADIO ASTRONOMY OBSERVATORY (NRAO) (AST-7908925 A30); \$7,210,000

HUGHES, ROBERT E; CONTRACT FOR THE OPERATION, MANAGEMENT, AND MAINTENANCE OF THE NATIONAL RADIO ASTRONOMY OBSERVATORY (NRAO) (AST-7908925 A31); \$7,630,000

NATIONAL CENTER FOR ATMOSPHERIC RESEARCH

ALABAMA

UNIVERSITY OF ALABAMA IN HUNTSVILLE

WU, SHI-TSAN, AND DRYER, MURRAY; TRAVEL SUPPORT FOR U.S. PARTICIPANTS IN THE SOLAR/INTERPLANETARY INTERVALS FOR SOLAR MAXIMUM YEAR WORKSHOP (ATM-8209909*); 12 MONTHS \$5,000

ALASKA

UNIVERSITY OF ALASKA FAIRBANKS CAMPUS-GEOPHYSICAL INSTITUTE

ROEDERER, JUAN G; EQUIPMENT FOR DIGITAL SCALING OF ANALOG GEOPHYSICAL RECORDS (EAR-8114404 A01*); \$8,452

ARIZONA

UNIVERSITY OF ARIZONA

DAMON, PAUL E, AND DONAHUE, DOUGLAS J; REGIONAL INSTRUMENTATION FACILITY FOR RADIOCARBON DATING AND TRACE ELEMENT ANALYSIS (CHE-78181* S A04*); 18 MONTHS \$37,000

CALIFORNIA

SRI INTERNATIONAL

KELLY, JOHN D; RELOCATION OF THE INCOHERENT-SCATTER RADAR FROM CHATANIKA, ALASKA TO A VERY HIGH GEOMAGNETIC LATITUDE (ATM-8024889 A04*); \$74,000

UNIVERSITY OF CALIFORNIA, LOS ANGELES

YANAI, MICHIO; INVESTIGATION OF TROPICAL MOTION SYSTEMS (29M-8204086*); 12 MONTHS \$38,584

ASHOUR-ABDALLA, MAHA; THE FIRST INTERNATIONAL SCHOOL FOR SPACE SIMULATIONS; KYOTO, JAPAN (ATM-8214614*); 6 MONTHS \$5,000

COLORADO

NATIONAL CENTER FOR ATMOSPHERIC RESEARCH

WHITE, ROBERT M; OPERATION, MAINTENANCE AND MANAGEMENT OF THE NATIONAL CENTER FOR ATMOSPHERIC RESEARCH AND THE NATIONAL SCIENTIFIC BALLOON FACILITY (ATM-7723757 A95*); \$5,500,000

WHITE, ROBERT M; OPERATION, MAINTENANCE AND MANAGEMENT OF THE NATIONAL CENTER FOR ATMOSPHERIC RESEARCH AND THE NATIONAL SCIENTIFIC BALLOON FACILITY (ATM-7723757 A96*); \$5,100,000

WHITE, ROBERT M; OPERATION, MAINTENANCE AND MANAGEMENT OF THE NATIONAL CENTER FOR ATMOSPHERIC RESEARCH AND THE NATIONAL SCIENTIFIC BALLOON FACILITY (ATM-7723757 AA1*); \$18,790,000

WHITE, ROBERT M; OPERATION, MAINTENANCE AND MANAGEMENT OF THE NATIONAL CENTER FOR ATMOSPHERIC RESEARCH AND THE NATIONAL SCIENTIFIC BALLOON FACILITY (ATM-7723757 AA1*); \$90,445

WHITE, ROBERT M; OPERATION, MAINTENANCE AND MANAGEMENT OF THE NATIONAL CENTER FOR ATMOSPHERIC RESEARCH AND THE NATIONAL SCIENTIFIC BALLOON FACILITY (ATM-7723757 AA6*); \$2,380,000

WHITE, ROBERT M; OPERATION, MAINTENANCE AND MANAGEMENT OF THE NATIONAL CENTER FOR ATMOSPHERIC RESEARCH AND THE NATIONAL SCIENTIFIC BALLOON FACILITY (29M-7723757 AA9*); \$4,050

WHITE, ROBERT M; OPERATION, MAINTENANCE AND MANAGEMENT OF THE NATIONAL CENTER FOR ATMOSPHERIC RESEARCH AND THE NATIONAL SCIENTIFIC BALLOON FACILITY (29M-7723757 AB1*); \$6,366

WHITE, ROBERT M; OPERATION, MAINTENANCE AND MANAGEMENT OF THE NATIONAL CENTER FOR ATMOSPHERIC RESEARCH AND THE NATIONAL SCIENTIFIC BALLOON FACILITY (29M-7723757 AB3*); \$19,088

WHITE, ROBERT M; OPERATION, MAINTENANCE AND MANAGEMENT OF THE NATIONAL CENTER FOR ATMOSPHERIC RESEARCH AND THE NATIONAL SCIENTIFIC BALLOON FACILITY (29M-7723757 AB9*); \$4,999

WHITE, ROBERT M; OPERATION, MAINTENANCE AND MANAGEMENT OF THE NATIONAL CENTER FOR ATMOSPHERIC RESEARCH (ATM-8217015*); 60 MONTHS \$1

HAWAII

UNIVERSITY OF HAWAII-MANOA

RAMAGE, COLIN S; SYNOPSIS METEOROLOGY OF CHINA - A TEXT (ATM-8210901*); 12 MONTHS \$7,000

MARYLAND

LEHMAN-SCAFFA ART & PHOTOGRAPHY INC

SCAFFA, ANTHONY R; GRAPHIC ARTS SERVICES (PRM-8122155 A01); \$23,000

NATIONAL OCEANIC ATMOSPHERIC ADMINISTRATION-ENVIRONMENTAL DATA SERVICE

MILLER, JOHN M; INTERAGENCY AGREEMENT IN SUPPORT OF EDITORIAL SERVICES IN CONNECTION WITH PRODUCTION OF A MONOGRAPH ON AEROSOLS AND CLIMATE (ATM-8206866*); 12 MONTHS \$12,200

NATIONAL OCEANIC ATMOSPHERIC ADMINISTRATION

FLEMING, REX J; ARGOS DATA COLLECTION AND LOCATION SURVEY (OCE-8108974 A01*); 12 MONTHS \$10,500

UNIVERSITY OF MARYLAND, COLLEGE PARK

MASS, CLIFFORD F; AN OBSERVATIONAL STUDY OF THE PUGET SOUND CONVERGENCE ZONE (ATM-7915153 A02*); \$674

MASSACHUSETTS

ATMOSPHERIC AND ENVIRONMENTAL RESEARCH INC

FOUKAL, PETER V; A STUDY OF THE INFLUENCE OF MAGNETIC ACTIVITY ON SOLAR LUMINOSITY (ATM-8200763*); 12 MONTHS \$1,200

BOSTON UNIVERSITY

HUGHES, W J; MULTI-SATELLITE STUDIES OF GEOMAGNETIC PULSATIONS (ATM-8209025*); 12 MONTHS \$5,500

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

FELD, MICHAEL S; REGIONAL INSTRUMENTATION FACILITY FOR LASER SPECTROSCOPY AND DYNAMICS (CHEMISTRY) (CHE-7818580 A03*); 12 MONTHS \$24,000

MINNESOTA

UNIVERSITY OF MINNESOTA

WRIGHT, HERBERT E, AND CUSHING, EDWARD J; COHMAP-CLIMATES OF THE HOLOCENE: MAPPING BASED ON POLLEN DATA (ATM-8112840 A05*); \$8,584

MISSOURI

UNIVERSITY OF MISSOURI, ROLLA

PLUMMER, PATRICIA L; SIXTH INTERNATIONAL CONFERENCE ON THE PHYSICS AND CHEMISTRY OF ICE (AUGUST 2-6, 1982) (ATM-8207411*); 12 MONTHS \$3,000

NEBRASKA

UNIVERSITY OF NEBRASKA AT LINCOLN

WILHITE, DONALD A, ROSENBERG, NORMAN J, AND GLANTZ, MICHAEL H; GOVERNMENTAL RESPONSE TO THE MID-1970'S DROUGHT: A CASESTUDY OF THREE GREAT PLAINS STATES (ATM-8108447 A01*); \$27,015

NEVADA

DESERT RESEARCH INSTITUTE

HUDSON, JAMES G; FIELD MEASUREMENTS OF CCN SPECTRA AND CONDENSATION COEFFICIENT VARIATIONS (29M-8109562 A01*); 3 MONTHS \$8,740

NEW JERSEY

PRINCETON UNIVERSITY

SARMIENTO, JORGE L, AND HELD, ISAAC M; GRADUATE STUDENT RESEARCH IN ATMOSPHERE-OCEAN INTERACTION AND CLIMATIC VARIABILITY (ATM-8106800 A01*); 12 MONTHS \$14,800

OHIO

OHIO STATE UNIVERSITY

THOMPSON, LONNIE G. PALEOCLIMATIC ICE CORE RECORDS FROM THE TROPICAL QUELCCAYA ICE CAP (ATM-8105079 A01*); 12 MONTHS \$3,500

RHODE ISLAND

BROWN UNIVERSITY

IMBRIE, JOHN. PROJECT SPECMAP: MAPPING VARIATIONS IN OCEAN SPECTRA OVER A FREQUENCY RANGE 10-5 TO 10-1 CYCLES PER YEAR (ATM-8018897 A02*); \$7,850

WASHINGTON

UNIVERSITY OF WASHINGTON

BAKER, D JAMES, AND NOWLIN, WORTH D. ANALYSIS OF FGGE DRIFTING BUOY DATA (29M-8018172 A01*); 12 MONTHS \$1,800

WALLACE, JOHN M. AND HARTMANN, DENNIS L. GENERAL CIRCULATION STUDIES (CLIMATE DYNAMICS) (ATM-8106099 A01*); 12 MONTHS \$900

WYOMING

UNIVERSITY OF WYOMING

HOFMANN, DAVID J. AND ROSEN, JAMES M. SUPPLEMENT TO STUDY OF STRATOSPHERIC AEROSOL SOURCES AND FORMATION PROCESSES (ATM-8016866 A02*); \$49,500

VALI, GABOR. CLOUD PHYSICS STUDIES: WMO PRECIPITATION ENHANCEMENT PROJECT (ATM-8022549 A01*); 1 MONTHS \$156

AUER, AUGUST H. ASSESSMENT OF TERRAIN PHYSIOGRAPHICAL AND TOPOGRAPHICAL INFLUENCES ON CONVECTIVE CLOUD INITIATION IN CCOP (ATM-8107096 A01*); 2 MONTHS \$5,975

SCIENTIFIC, TECHNOLOGICAL AND INTERNATIONAL AFFAIRS

INDUSTRIAL SCIENCE AND TECHNOLOGICAL INNOVATION

ARIZONA

UNIVERSITY OF ARIZONA

DEMER, LOUIS J. INDUSTRY/UNIVERSITY COOPERATIVE PROGRAM (IUC): CORRELATION OF ELECTRICALLY ACTIVE DEFECTS IN SILICON WAFERS WITH STRUCTURAL INHOMOGENEITIES IN AS-GROWN CRYSTALS (DMR-7918023 A02*); 12 MONTHS \$56,100

GIBBS, HYATT M. IUC: OPTICAL BISTABILITY EXPERIMENTS TO IMPROVE SOLID-STATE DEVICES AND BASIC UNDERSTANDING (ECS-802000J A01*); 12 MONTHS \$45,381

RANDOLPH, ALAN D. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: EXPERIMENTAL AND THEORETICAL STUDIES OF PARTICLE SIZE DISTRIBUTION IN CRYSTALLIZATION PROCESSES (CPE-8117753*); 12 MONTHS \$32,498

ROSKOSKI, JOANN P. UNIVERSITY/INDUSTRY COOPERATIVE RESEARCH: ESTABLISHMENT OF WOODY LEGUMES ON DISTURBED TROPICAL LANDS (DEB-81744*); 24 MONTHS \$24,950

CALIFORNIA

ADVANCED RESEARCH AND APPLICATION CORPORATION

KOPPEL, LOUIS N. AN X-RAY CONCENTRATOR USING LAYERED SYNTHETIC MICROSTRUCTURES FOR X-RAY MICROLITHOGRAPHY APPLICATIONS (ECS-8260408*); 6 MONTHS \$29,168

AEROVIRONMENT INC

TOMBACH, IVAR H. AUTOMATIC DETERMINATION OF ATMOSPHERIC MIXING DEPTH AND INVERSION HEIGHTS (ATM-8260296*); 6 MONTHS \$29,896

AGRIABIAN ASSOCIATES

EWING, ROBERT D. AND ADHAM, SAMY A. GUIDELINES FOR MITIGATION OF SEISMIC HAZARDS IN TILT-UP WALL STRUCTURES: PHASE II (CEE-8114437*); 12 MONTHS \$194,920

AQUACULTURE SYSTEMS INTERNATIONAL

VAN OLST, JON C. WASTE HEAT MARICULTURE OF STRIPED BASS FOR POPULATION ENHANCEMENT AND FOOD PRODUCTION (OCE-8260106*); 6 MONTHS \$30,000

CALIFORNIA INSTITUTE OF TECHNOLOGY

SABERSKY, ROLF H., BRENNEN, CHRISTOPH E., GROSS, L. H. AND HARGETY, R. O. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH PROGRAM: FLOW AND HEAT TRANSFER IN GRANULAR MEDIA (MEA-7915132 A02*); 12 MONTHS \$57,347

CALIFORNIA STATE UNIVERSITY, LONG BEACH

CEBEI, TUNCER. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH: THEORETICAL AND EXPERIMENTAL ANALYSIS OF INTERACTING FLOWS OVER MULTIELEMENT AIRFOILS AT HIGH REYNOLDS NUMBERS (MEA-8018563 A01*); 12 MONTHS \$56,500

CHARLES EVANS & ASSOCIATES

BLATTNER, RICHARD J. AN EVALUATION OF SELECTED MATERIALS PROCESSING APPLICATIONS FOR CONTINUOUS WAVE LAMP ANNEALING (DMR-8260631*); 6 MONTHS \$29,625

CYCLOTOMICS INC

BERLEKAMP, ELWYN R. INTERLEAVED CODING FOR BURSTY CHANNELS (ECS-8260180*); 6 MONTHS \$30,000

DYNAMICS TECHNOLOGY INC

MC LAUGHLIN, DENNIS, AND DUBE, C. M. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH: PARTICLE MOTION IN A TURBULENT BOUNDARY LAYER (MEA-8003437 A01*); 12 MONTHS \$32,675

ENBIO INC

BENEMANN, JOHN R. POLYSACCHARIDE PRODUCTION BY MICROALGAE - PH II (CPE-8019903 A01*); 12 MONTHS \$111,655

BENEMANN, JOHN R. AND WEISSMAN, JOSEPH C. MICROALGAE PRODUCTION OF GLYCEROL AND RELATED CHEMICALS ON SALINE WATERS (CPE-8115805*); 12 MONTHS \$120,910

WEISSMAN, JOSEPH C. INDUSTRIAL POLYSACCHARIDE PRODUCTION BY MICROBIAL SYSTEMS (CPE-8260535*); 6 MONTHS \$30,000

ENERGY & ENVIRONMENTAL RESEARCH CORPORATION

POHL, JOHN H. AND SEEKER, W. R. IMPROVED COAL FLAME DETECTION (CPE-8260344*); 6 MONTHS \$29,999

FLOKOD CORPORATION

WATERS, RODNEY L. LASER DEPOSITION FOR IC MASK MICROFAULT REPAIR (ECS-8260590*); 6 MONTHS \$30,000

HARVEY MUDD COLLEGE

MYHRE, PHILIP C. INDUSTRIAL/UNIVERSITY COOPERATIVE PROGRAM: CARBON-13 NMR STUDIES OF CARBONIUM IONS IN THE SOLID STATE (CHE-8020743 A01*); 12 MONTHS \$33,466

INTEGRATED SYSTEMS INC-CAL

WALKER, ROBERT. COMPUTER AIDED DESIGN METHODS FOR SYSTEMS ANALYSIS (MCS-8260588*); 6 MONTHS \$29,179

LAGUNA RESEARCH LABORATORY

LOOS, HENDRICUS G. IMAGE TRANSFORMER SEEING AID FOR MACULAR DEGENERATION PATIENTS (ECS-8260547*); 6 MONTHS \$29,560

MACHINE INTELLIGENCE CORPORATION

MILGRAM, DAVID L. AN INTEGRATED ARCHITECTURE FOR INDUSTRIAL 3-D VISION (ECS-8260718*); 6 MONTHS \$30,000

NEUSHUL MARICULTURE INC

NEUSHUL, MICHAEL, HARGER, BRUCE W., POLNE, MIRIAM, AND WOESSNER, JAMES W. THE DEVELOPMENT OF A U.S. SOURCE OF AGAR (CPE-8110034*); 12 MONTHS \$80,000

PERCEPTRONICS INC

THORNDYKE, PERRY W. A HAND-HELD DEVICE FOR COMPUTER ASSISTED POSITION IDENTIFICATION IN NATURAL TERRAIN (ECS-8260392*); 6 MONTHS \$29,918

PHRASOR SCIENTIFIC INC

PEREL, JULIUS. EVALUATION OF A NEW TECHNIQUE FOR THE DEPOSITION OF CONDUCTIVE PATTERNS AND CONTACTS FOR MICROELECTRONICS (ECS-8260262*); 6 MONTHS \$29,910

RAND CORPORATION

BIKSON, TORA. IMPLEMENTING COMPUTERIZED PROCEDURES IN OFFICE SETTINGS: INFLUENCES AND OUTCOMES (ISI-8110792); 12 MONTHS \$93,268

BIKSON, TORA. IMPLEMENTING COMPUTERIZED PROCEDURES IN OFFICE SETTINGS: INFLUENCE AND OUTCOMES (ISI-8110792 A01*); 18 MONTHS \$15,000

RELATIONAL TECHNOLOGY INC

KOOL, ROBERT. MANAGING TEXT AS DATA (INFORMATION SCIENCE) (IST-8260519*); 6 MONTHS \$29,786

BUTTERWORTH, PAUL E. TABLE-DRIVEN CODE GENERATION APPLIED TO A DATABASE MANAGEMENT SYSTEM (MCS-8260520*); 6 MONTHS \$29,550

ROCKWELL INTERNATIONAL CORPORATION

CLARKE, DAVID R. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: THERMODYNAMIC PARAMETERS RELATING PHASE RETENTION AND MICROCRACKING IN CERAMICS (DMR-8007445 A03*); 12 MONTHS \$81,200

SPECTRON DEVELOPMENT LABORATORIES INC

HILDEBRAND, B. P. AND FITZPATRICK, GERALD R. NEAR SURFACE FLAW DETECTION BY ULTRASONIC CRITICAL ANGLE IMAGING (DMR-8116240*); 12 MONTHS \$98,685

DOTY, J. L. ASTIGMATIC NONCONTACT OPTICAL GAUGING (DMR-8260457*); 6 MONTHS \$30,000

CRAIG, JAMES E. AND POON, CHIE C. COMBUSTION MEASUREMENTS WITH A NEW LASER TECHNIQUE (DMR-8260638*); 6 MONTHS \$30,000

STANFORD UNIVERSITY

GOODMAN, JOSEPH W. AND MACOVSKI, ALBERT. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH PROJECT: THREE DIMENSIONAL VISUALIZATION OF COMPUTERIZED TOMOGRAPHY IMAGES (ECS-7986432 A02*); 12 MONTHS \$92,603

DONACH, SEBASTIAN, AND HUBERMAN, B. A. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: THEORY OF COOPERATIVE PHENOMENA IN SUPERFLUID SYSTEMS OF REDUCED DIMENSIONALITY (DMR-8007934 A02*); 12 MONTHS \$16,500

COHEN, BERNARD P. THE RELATIONSHIP BETWEEN TEAM SOCIAL STRUCTURE AND TEAM INNOVATION (ISI-8100383 A01); 6 MONTHS \$6,190

LINDAU, INGOLF. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH: RELATIONSHIP OF ATOMIC AND ELECTRONIC STRUCTURE OF SEMICONDUCTOR SURFACES AND INTERFACES (DMR-8106345*); 8 MONTHS \$80,000

COLLMAN, JAMES P. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH PROJECT: REVERSIBLE OXYGEN ELECTRODE: COLLABORA-

TIVE SEARCH FOR NEW CATALYSTS AND PHYSICAL TEXTURES (CHE-8110545 A01*); 12 MONTHS \$50,000

IGLEHART, DONALD L. SIMULATION OUTPUT ANALYSIS FOR LOCAL COMPUTER NETWORKS (MCS-820483*); 12 MONTHS \$49,157

SYMANTEC

ROBINSON, ANN E. A FRAMEWORK FOR MANAGING DISSIMILAR DATA (COMPUTER AND INFORMATION SCIENCES) (MCS-8260719*); 6 MONTHS \$29,999

SYNERGISTIC DEVELOPMENT ASSOCIATES

ROGERS, ARTHUR H. MULTICHANNEL APPROACH TO A VARIABLE FOCUSED X-RAY COLLIMATION SYSTEM (PHY-8260196*); 6 MONTHS \$27,280

TACTICON CORPORATION

SAUNDEP'S, FRANK A. A LOW-COST, WEARABLE, HIGH-RESOLUTION TACTILE COMMUNICATION SYSTEM (ECS-8260488*); 6 MONTHS \$30,000

UNIVERSITY OF CALIFORNIA, BERKELEY

WONG, EUGENE. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: HETEROGENEOUS DATA MODELS AND DISTRIBUTED DATABASE ARCHITECTURE (ECS-800766J A03*); 12 MONTHS \$51,096

MULLER, R. S. AND WHITE, R. M. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: CONCEPTS AND TECHNOLOGIES FOR INTEGRATED SENSORS (ECS-8120562*); 12 MONTHS \$49,000

CARROLL, MICHAEL M. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH PROJECT: INELASTIC RESPONSE OF FLUID-FILLED POROUS MATERIALS (SOLID MECHANIC AND MECHANICAL ENGINEERING) (MEA-8200534*); 12 MONTHS \$15,471

UNIVERSITY OF CALIFORNIA, LOS ANGELES

YEH, CAVOUR W. AND GERLA, MARIO. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH PROJECT: THE EXPLOITATION OF GUIDED WAVE OPTICS IN LOCAL COMPUTER NETWORKS (ECS-8020300 A02*); 12 MONTHS \$82,718

CHAIKIN, PAUL M. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: ORGANIC CHARGE-TRANSFER SALTS (DMR-8115247*); 13 MONTHS \$38,300

UNIVERSITY OF CALIFORNIA, SAN DIEGO

MAPLE, M. BRIAN. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: CORRELATIONS BETWEEN SUPERCONDUCTIVITY AND MAGNETISM THROUGH NEW TERNARY COMPOUNDS (DMR-8017723 A02*); 12 MONTHS \$59,500

UNIVERSITY OF SOUTHERN CALIFORNIA

BROWAND, FREDERICK K. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH: PARTICLE MOTION IN A TURBULENT BOUNDARY LAYER (MEA-7910730 A01*); 12 MONTHS \$32,675

VESTAR RESEARCH INC

GAMBLE, RONALD C. RADIOALABELLED WHITE CELL POPULATIONS USING PHOSPHOLIPID VESICLES (BNS-8260156*); 6 MONTHS \$29,860

COLORADO

COLORADO STATE UNIVERSITY

LEYDEN, DONALD E. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH PROJECT: CHEMICAL AND SPECTROSCOPIC CHARACTERIZATION OF MODIFIED SURFACES (CHE-8210014*); 4 MONTHS \$54,045

COURY & ASSOCIATES INC

MICKLEY, MICHAEL C. SELECTIVE MEMBRANE SEPARATION OF SOLUTES USING HIGHLY SPECIFIC COMPLEXING AGENTS (CPE-8260414*); 6 MONTHS \$28,975

SIMONS - LI & ASSOCIATES INC

LI, R. M. PARALLEL PROCESSOR ALGORITHM FOR SOLVING THREE DIMENSIONAL GROUNDWATER FLOW EQUATIONS (MCS-8260280*); 6 MONTHS \$29,432

UNIVERSITY OF COLORADO AT BOULDER

GUSTAFSON, KARL E. COMPUTATIONAL STUDIES AND SOFTWARE DEVELOPMENT IN HYDRODYNAMICS, CONCENTRATION DIFFUSION EQUATIONS, AND CHEMICAL KINETICS (MCS-8012220 A01*); 12 MONTHS \$31,386

HACHTEL, GARY D. AND LIGHTNER, MICHAEL R. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH PROJECTS: RESEARCH ON TOPOLOGICAL DESIGN TOOLS FOR STRUCTURED LOGIC ARRAYS (ECS-8121446*); 12 MONTHS \$50,000

KRANTZ, WILLIAM B. SANI, ROBERT L. AND LONSDALE, HAROLD K. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: SKIN FORMATION IN ASYMMETRIC MEMBRANES (CPE-8121843*); 12 MONTHS \$17,295

CONNECTICUT

ADVANCED FUEL RESEARCH INC

SOLOMON, PETER R. AND HAMLEN, DAVID G. CHARACTERIZATION OF BIOMASS AS A SOURCE OF CHEMICALS (CPE-8107453*); 12 MONTHS \$42,217

SIMCO INC

MASON, STANLEY I. CLONAL PROPAGATION OF CHINESE TALLOW VIA CULTURED TISSUES AND CELLS (PCM-8260154*); 6 MONTHS \$30,000

UNIVERSITY OF CONNECTICUT

EPLING, GARY A. AND SRINIVASAN, R. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: PHOTOCHEMISTRY FROM HIGHER

EXCITED STATES OF 1,4-DIENES AND ALLYLCYCLOPROPANES (CHEMISTRY) (CHE-8015355 A03*); 12 MONTHS \$45,600

YALE UNIVERSITY

HERZENBERG, ARVID, AND HYMAN, HOWARD. INDUSTRY/UNIVERSITY CO-OPERATIVE RESEARCH ACTIVITY: THEORETICAL INVESTIGATION OF ELECTRON IMPACT EXCITATION PROCESSES (PHY-8005467 A03*); 12 MONTHS \$66,343

RANIS, GUSTAV, EVENSON, ROBERT E. AND FEI, JOHN C. RESEARCH PROGRAM IN INTERNATIONAL AND DOMESTIC DETERMINANTS OF LDC TECHNOLOGY CHOICE: CONTRASTING AGRICULTURAL AND INDUSTRIAL EXPERIENCE (ISI-8018867 A02); 7 MONTHS \$143,279

LEVIN, RICHARD C. DYNAMIC COMPETITION: A PROGRAM OF RESEARCH ON TECHNOLOGICAL CHANGE AND MARKET STRUCTURE (PRA-8019779 A01*); 12 MONTHS \$99,835

ORNSTON, L. NICHOLA. NOVEL MUTATIONS IN METABOLIC EVOLUTION (PCM-8110075*); 12 MONTHS \$20,000

CHANG, RICHARD K. AND LEIF, ROBERT C. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: SIZE, SHAPE, AND COMPOSITION CHARACTERIZATION OF DIELECTRIC PARTICULATES BY LIGHT SCATTERING (CPE-8112835*); 12 MONTHS \$30,000

DELAWARE

UNIVERSITY OF DELAWARE

GATES, BRUCE C. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: SUPPORTED METAL AND METAL CLUSTER CATALYSTS (CPE-8016212 A02*); 12 MONTHS \$119,000

PAULAITIS, MICHAEL E. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ON THERMODYNAMIC SOLVENT EFFECTS ON DIELS-ALDER REACTIONS IN SUPERCRITICAL-FLUID SOLVENTS (CPE-8115030*); 12 MONTHS \$24,913

DISTRICT OF COLUMBIA

AMERICAN UNIVERSITY

WATERS, PAUL F. AND BREUER, MIKLOS M. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: ADSORPTION OF POLYMER-SURFACTANT COMPLEXES ON SOLID SURFACES (CPE-8010687 A01*); \$4,750

BROOKINGS INSTITUTION

ARMINGTON, CATHERINE, AND ODLE, MARJORIE. THE EFFECTS OF REGIONAL STRUCTURE ON THE FORMATION OF HIGH TECHNOLOGY FIRMS AND ON EMPLOYMENT GROWTH (ISI-8212970*); 8 MONTHS \$97,725

FLORIDA

APPLIED TECHNOLOGY ASSOCIATES

CAVALLERI, ROBERT. IMPROVED SELF LUBRICATING VANE (MEA-8260127*); 6 MONTHS \$25,812

UNIVERSITY OF FLORIDA

TANNER, DAVID B. AND EPSTEIN, ARTHUR J. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: CONDUCTING POLYMERS: MAGNETIC, OPTICAL, AND TRANSPORT STUDIES (DMR-8218021*); 4 MONTHS \$29,000

GEORGIA

GEORGIA INSTITUTE OF TECHNOLOGY MAIN CAMPUS

GAYLORD, THOMAS K. AND MOHARAM, M. G. INDUSTRY/UNIVERSITY COLLABORATIVE RESEARCH (IUCR): TWODIMENSIONAL OPTICAL PARALLEL DIGITAL WORK/SIGNATURE DETECTOR (ECS-8106683*); 36 MONTHS \$50,000

ION TECHNOLOGY INC

SOLNICK-LEGG, HILLARY F. REACTIVE ION IMPLANTATION PROCESS FOR REDUCING WEAR IN TOOL AND BEARING STEELS (PHY-8260465*); 6 MONTHS \$28,558

MILLIMETER WAVE TECHNOLOGY INC

KOZAKOFF, D. J. MILLIMETER WAVE RADIOMETRIC DETECTION OF ICE ON AIRCRAFT (DMR-8260237*); 6 MONTHS \$27,352

HAWAII

KAHUKU PRAWN COMPANY INC

MALECHA, SPENCER R. TOPIC NO. 16: DEVELOPMENT OF A NEW MANAGEMENT TECHNOLOGY FOR COMMERCIAL PRAWN FARMING: PHASE I (OCE-8113995*); 12 MONTHS \$29,853

SEACO INC

FOSTER, MARIDELL A. INCREASING AQUACULTURE POND PRODUCTION THROUGH INNOVATIVE ARTIFICIAL CIRCULATION/AERATION (ENVIRONMENTAL BIOLOGY) (DEB-8260379*); 6 MONTHS \$30,000

ILLINOIS

B C LEATHER COMPANY

CHASSON, BASIL. TOPIC 13: FREEZE DRY PREPARATION FOR RAPID LEATHER TANNAGE (MEA-8260490*); 6 MONTHS \$30,000

NORTHWESTERN UNIVERSITY

CHENG, HERBERT S. UNIVERSITY/INDUSTRY COOPERATIVE RESEARCH: AN ANALYTICAL MODEL FOR PREDICTION OF SURFACE PITTING LIFE IN SPUR AND HELICAL GEARS (MEA-7923261 A02*); 12 MONTHS \$81,340

CHUNG, YIP-WAH, AND FINE, MORRIS E. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: SURFACE CONDITIONS ON FATIGUE

CRACK INITIATION IN IRON AND STEELS (DMR-7926179 A02*); 12 MONTHS \$43,900

RUBENSTEIN, ALBERT H. **PRODUCTIVITY OF THE INTERFACE BETWEEN R&D AND PRODUCTION** (MEA-8207373*); 12 MONTHS \$34,980

UNIVERSITY OF CHICAGO

LEVI-SETTI, RICCARDO. **INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: DEVELOPMENT OF A NEW HIGH-RESOLUTION SCANNING ION MICROPROBE** (DMR-8007978 A03*); 12 MONTHS \$109,900

FREED, KARL F. **INDUSTRY/UNIVERSITY COOPERATIVE ACTIVITY: THEORETICAL STUDIES IN CHEMISTRY** (CHE-8023456 A01*); 12 MONTHS \$40,000

INDIANA

PURDUE UNIVERSITY

ARONSON, ARTHUR I. **STRUCTURE AND FUNCTION OF BACILLUS THURINGIENSIS** (PCM-7907591 A02*); 12 MONTHS \$65,000

REKLAITIS, GINTARAS V. AND OKOS, M. R. **INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: COMPUTER AIDED DESIGN & ANALYSIS OF MULTIPRODUCT BATCH/SEMICONINUOUS PROCESSES** (CPE-7924563 A02*); 12 MONTHS \$109,990

PIERRET, ROBERT F. AND GUNSHOR, ROBERT L. **IUC: ELECTROPHYSICAL ASPECTS OF MONOLITHIC (ZNO) SAW STRUCTURES** (ECS-8009793 A01*); 12 MONTHS \$68,614

FRIEDLAENDER, FRITZ J., WANKAT, PHILLIP C. AND PETRAKIS, LEON. **INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: HIGH GRADIENT MAGNETIC SEPARATION** (CPE-8023184 A01*); 12 MONTHS \$72,000

LOUISIANA

CORROSION SCIENCES & TECHNOLOGIES INC

GUPTA, SATYA. **A METAL OXIDE CHELATE OXYGEN SCAVENGER FOR DEEP DRILLING OPERATIONS** (CEE-8260666*); 6 MONTHS \$29,300

MAINE

SEA RUN INC

SAWYER, EVELYN S. **SEA RANCHING OF WESTERN PACIFIC PINK CHUM SALMON IN THE WESTERN ATLANTIC** (OCE-8260559*); 6 MONTHS \$28,647

UNIVERSITY OF MAINE, ORONO

SMITH, CHARLES W. **INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: TIME AND SPACE-RESOLVED TURBULENCE IN SUPERFLUID HELIUM-4** (DMR-8005358 A02*); 12 MONTHS \$93,500

MARYLAND

ADVANCED TECHNOLOGY & RESEARCH INC

DAGALAKIS, NICHOLAS G. **OPTIMIZATION OF ROBOT MANUFACTURING OPERATIONS** (ECS-8260437*); 6 MONTHS \$29,907

AMAF INDUSTRIES INC

GRAVES, RONALD D. **MAGNETIC LIQUID METAL TWO PHASE FLOW RESEARCH** (MEA-8260449*); 6 MONTHS \$30,000

CAPITAL SYSTEMS GROUP INC

CLANSKY, KENNETH B. **SUPPORT SERVICES FOR RESEARCH INFORMATION PROCESSING DISSEMINATION PROGRAMS** (08G-8020049 A02*); 12 MONTHS \$15,714

CLANSKY, KENNETH B. **SUPPORT SERVICES FOR RESEARCH INFORMATION PROCESSING DISSEMINATION PROGRAMS** (06M-8020049 A03*); 12 MONTHS \$16,000

EMV ASSOCIATES INC

MCLEAR, JAMES H. AND WEHRUNG, JOHN M. **ELECTRON BEAM LITHOGRAPHY OF PROTEIN MONOLAYER, ULTRATHIN COMPOSITE RESIST FILMS** (ECS-8115677*); 12 MONTHS \$99,663

MCLEAR, JAMES H. **ELECTRICAL MEASUREMENTS OF ORDERED BIOLOGICAL MATERIALS** (DMR-8260676*); 6 MONTHS \$29,985

HYDRONAUTICS INC

WAXMAN, ALLEN M. **KINEMATICS OF IMAGE FLOWS WITH APPLICATION TO COMPUTER VISION** (ECS-8260447*); 6 MONTHS \$30,000

CHAHINE, GEORGES L. **A SINGULAR PERTURBATION THEORY OF THE GROWTH OF A BUBBLE-CLUSTER IN A SUPERHEATED LIQUID** (MEA-8260689*); 6 MONTHS \$30,000

JOHNS HOPKINS UNIVERSITY

COWAN, DWAIN O. **INDUSTRY - UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: SYSTEMATIC DEVELOPMENT OF NEW ORGANIC CONDUCTORS** (DMR-8015318 A02*); 12 MONTHS \$99,600

LAW MATHEMATICS AND TECHNOLOGY INC

SPONSLER, GEORGE C. **IMPACT OF THE ECONOMIC RECOVERY TAX ACT OF 1981 ON HIGHTECHNOLOGY SMALL BUSINESS INNOVATION: AN EMPIRICAL STUDY** (ISI-8217039); 3 MONTHS \$9,999

LEHMAN-SCAFFA ART & PHOTOGRAPHY INC

SCAFFA, ANTHONY R. **GRAPHIC ARTS SERVICES** (PRM-8122155 A02*); \$2,000

MARTIN MARIETTA CORPORATION-MARTIN MARIETTA LABORATORY

SKALNY, JAN P. **INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: FORMATION AND REACTIVITY OF TRICALCIUM SILICATE AND DICALCIUM SILICATE** (CEB-7902665 A02*); 12 MONTHS \$42,500

PRB ASSOCIATES INC

BASS, WILLIAM R. **DETERMINATION OF THE REQUIREMENTS FOR USE OF THREEDIMENSIONAL DISPLAYS IN ULTRASONIC IMAGING** (MCS-8260495*); 6 MONTHS \$29,836

UNIVERSITY OF MARYLAND, COLLEGE PARK

BAILEY, WILLIAM J. AND KLIMENT, CHARLES K. **INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: RINGOPENING POLYMERIZATION** (DMR-8016261 A01*); 12 MONTHS \$43,000

HATCH, RANDOLPH T., CADMAN, THEODORE W. AND COOK, THOMAS M. **INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: DEVELOPMENT OF CONTINUOUS, MIXED CULTURE PROCESSES** (CPE-8016547 A01*); 12 MONTHS \$46,740

MASSACHUSETTS

AERODYNE RESEARCH INC

CAULFIELD, H. JOHN. **SYNTHETIC HOLOGRAPHIC COMPUTATIONAL OUTPUT (INFORMATION SCIENCE)** (IST-8260094*); 6 MONTHS \$29,945

ALPHATECH INC

GULLY, SOL W. **ON-LINE ESTIMATION AND FAILURE PREDICTION OF DRILL BITS DURING OIL-WELL DRILLING OPERATION** (ECS-8260616*); 6 MONTHS \$29,023

ARLINGTON TECHNICAL SERVICES

HARVEY, W. WILLIAM. **ORE PROCESSING WITH CONCENTRATED MAGNESIUM CHLORIDE BRINES** (CPE-8260427*); 6 MONTHS \$29,955

ATMOSPHERIC AND ENVIRONMENTAL RESEARCH INC

FOUKAL, PETER V. **A HELIUM-COOLED CAVITY RADIOMETER FOR ABSOLUTE IRRADIANCE MEASUREMENTS** (DMR-8260273*); 6 MONTHS \$30,000

CASTLE TECHNOLOGY CORPORATION

PEMSLER, J. PAUL. **IRON AS A REDUCTANT IN AMMONIACAL SOLUTIONS** (CPE-8111229*); 12 MONTHS \$44,680

PEMSLER, J. PAUL. **ELECTROREFINING OF ALUMINUM** (CPE-8115213 A01*); \$88,621

CLARK UNIVERSITY

JONES, ALAN A., BENDLER, JOHN T. AND YEE, ALBERT F. **INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: NUCLEAR SPIN RELAXATION AND LOCAL MOTIONS IN SYNTHETIC POLYMERS** (DMR-8106239 A02*); 12 MONTHS \$30,000

CONTINUOUS LEARNING CORPORATION

COHEN, KAREN C. **ADAPTIVE REFERENCING-A NEW APPROACH TO DESIGN OF THE INTERFACE BETWEEN AN ACCESS SYSTEM AND ITS USER (INFORMATION SCIENCE)** (IST-8260081*); 6 MONTHS \$29,890

COVALENT ASSOCIATES INC

KOCH, VICTOR R. **AN IMPROVED RECHARGEABLE LITHIUM ELECTRODE** (CPE-8260047*); 6 MONTHS \$30,000

CRYSTAL SYSTEMS INC

KHATTAK, CHANDRA P. **GROWTH OF TITANIUM DOPED-ALUMINA CRYSTALS BY THE HEAT EXCHANGER METHOD** (DMR-8260712*); 6 MONTHS \$30,000

ENERGY & ENVIRONMENTAL ENGINEERING INC

PORTER, JAMES H. **LASER INDUCED DESTRUCTION OF TOXIC CHEMICALS CONTAINED IN WASTEWATERS** (CEE-8260577*); 6 MONTHS \$30,000

GINER INC

WONG, DAVID. **DEVELOPMENT OF AN ELECTROCHEMICAL HYDROGEN SULFIDE SENSOR** (CHE-8260431*); 12 MONTHS \$29,960

IMEC CORPORATION

FEJES, WILLIAM T. **A NEW, VARIABLE SPEED, INDUCTION MOTOR CONTROLLER APPROPRIATE FOR PAN AND PUMP APPLICATIONS** (MEA-8260411*); 6 MONTHS \$30,000

INTELLIGENT SOFTWARE SYSTEMS INC

KOHLER, RALF. **A TRAINABLE INTELLIGENT GRAPHICS SYSTEM** (ECS-8260635*); 6 MONTHS \$30,000

MARKO MATERIALS INC

PANCHANATHAN, V. **NEW NICKEL-BASE ALLOYS VIA SOLIDIFICATION PROCESSING** (DMR-8260132*); 6 MONTHS \$30,000

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

SATTERFIELD, CHARLES N. **INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: EFFECT OF BULK LIQUID VS. GAS PHASE ON SELECTIVITY IN THE FISCHER-TROPSCH SYNTHESIS** (CPE-7914173 A02*); 12 MONTHS \$35,800

HOWARD, JACK B. AND SIEGLA, DONALD C. **INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: SOOT FORMATION AND BURNOUT IN FLAMES** (CPE-8008071 A01*); 12 MONTHS \$26,760

WILLIAMS, JOHN E. **CONSTRUCTION OF A 600 MHZ NUCLEAR MAGNETIC RESONANCE SPECTROMETER** (CHE-8108374 A01*); 12 MONTHS \$174,500

WELSCH, ROY E. **INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH PROJECT: NONLINEAR EXPONENTIAL FAMILY AND BOUNDED-INFLUENCE REGRESSION** (MCS-8116778*); 12 MONTHS \$30,088

STEINFELD, JEFFREY I., SMITH, DONALD L. AND REINBERG, ALAN R. **INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH: LASER INITIATED CHEMICAL REACTIONS AT SEMICONDUCTOR SURFACES** (CHE-8121472*); 12 MONTHS \$85,000

DEMAIN, ARNOLD L. AND MAISCH, WELDON F. *INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: UPGRADING OF CELLULOSIC WASTES INCLUDING INDUSTRIAL FIBERS BY CLOSTRIDIUM THERMOCELLUM* (CPE-8202655*); 12 MONTHS \$45,000

MOLECULON RESEARCH CORPORATION

NICHOLS, LARRY D. *STUDY OF A NEW CONCEPT IN MEMBRANES RESISTANT TO BIOLOGICAL FOULING* (CPE-8260115*); 6 MONTHS \$29,720

NORTHEASTERN UNIVERSITY

LEE, DENIS, AND SPITAL, FRANCIS. *A RESEARCH CONFERENCE ON TECHNOLOGY MANAGEMENT* (ISI-8117888); 12 MONTHS \$8,900

PHYSICAL SCIENCES INC

FRISH, MICHAEL B. *SURFACE COATING AND ALLOYING BY LASER INDUCED PRESSURE* (DMR-8260084*); 6 MONTHS \$29,893

PTI OPTICS CORPORATION

ERDMANN, REINHARD K. *WAVELENGTH DIVISION MULTI DEMULTIPLEXER SYSTEM AND MULTIFIBER CABLE CONNECTORS FOR FIBER OPTICS COMMUNICATIONS* (ECS-8260384*); 6 MONTHS \$30,000

SCIENTIFIC SYSTEMS INC

USORO, PATRICK B. *ADVANCED CONTROL OF FLEXIBLE MANIPULATORS* (ECS-8260419*); 6 MONTHS \$30,000

SIGNATRON INC

KATES, JAMES M. *ENHANCEMENT OF SPEECH INTELLIGIBILITY FOR THE HEARING IMPAIRED* (ECS-8115807 A01*); 12 MONTHS \$76,990

SPARTA SYSTEMS INC

HENSHAW, PHILIP D. *A METHOD FOR AUTOMATED DEFECT DETECTION IN ELECTRONIC COMPONENTS* (MECHANICAL ENGINEERING) (MEA-8260557*); 6 MONTHS \$24,500

TRACER TECHNOLOGIES INC

WALSH, FRASER M. *ELECTROCHEMICAL OXIDATION OF POLYCHLORINATED BIPHENYLS* (CEE-8260095*); 6 MONTHS \$29,906

WALSH, FRASER M. *IMPROVED SILICON FILM PRODUCTION USING LASER GENERATED SIH₃ RADICALS* (ECS-8260160*); 6 MONTHS \$29,906

TRANSTECH INTERNATIONAL CORPORATION

WANG, GARY Y. *COMPUTER INPUT AND OUTPUT OF CHINESE IDEOGRAMS* (INFORMATION SCIENCE) (IST-8260251*); 6 MONTHS \$30,000

UNIVERSITY OF MASSACHUSETTS, AMHERST

STEIN, RICHARD S. AND VOGL, OTTO. *A CENTER FOR U MASS INDUSTRY RESEARCH ON POLYMERS* (ISI-8018103 A04); 12 MONTHS \$237,000

STEIN, RICHARD S. AND VOGL, OTTO. *CONFERENCE ON INDUSTRIAL SCIENCE AND TECHNOLOGICAL INNOVATION* (ISI-8205108*); 12 MONTHS \$54,500

VENTURE ECONOMICS - DCPIC

FAST, NORMAN D. *VENTURE CAPITAL INVESTMENT AND THE DEVELOPMENT OF NEW, HIGH TECHNOLOGY COMPANIES* (ISI-8213157*); 18 MONTHS \$106,375

MICHIGAN

MICHIGAN STATE UNIVERSITY

PETTY, CHARLES A. *INDUSTRY/UNIVERSITY COOPERATIVE ACTIVITY: THE EFFECT OF POLYMER ADDITIVES ON HYDROCYCLONE PERFORMANCE* (CPE-8015557 A01*); 9 MONTHS \$16,600

RAYCON CORP

SCHERR, NORMAN. *IMPROVED RESOLUTION IN LARGE FIELD OPTICAL GAUGING* (MECHANICAL ENGINEERING) (MEA-8260308*); 6 MONTHS \$30,000

SAGINAW VALLEY STATE COLLEGE

BRETT, ALISTAIR M. AND ROITMAN, DAVID B. *MANAGEMENT AND TECHNICAL ASSISTANCE TO SMALL TECHNOLOGYBASED FIRMS: AN EMPIRICAL ASSESSMENT* (ISI-8206669*); 12 MONTHS \$87,112

UNIVERSITY OF MICHIGAN-ANN ARBOR

SUMMERFIELD, GEORGE C. KING, JOHN S. AND ULLMAN, ROBERT. *INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: MOLECULAR CONFORMATION OF POLYMERS BY SMALL-ANGLE NEUTRON SCATTERING* (DMR-7926254 A02*); 12 MONTHS \$47,700

TANNENBAUM, ARNOLD S. *THE RELATIONSHIP OF EMPLOYEE OWNERSHIP TO THE TECHNOLOGICAL ADAPTIVENESS AND PERFORMANCE OF COMPANIES* (ISI-8104891 A01); 12 MONTHS \$74,208

COLE, ROBERT E. *SURVEY OF EARLY ADOPTERS OF QUALITY CONTROL CIRCLES* (ISI-8207215); 12 MONTHS \$16,525

WAYNE STATE UNIVERSITY

ALEXANDER, RALPH B. *INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: ION CHANNELING STUDIES OF SOLIDS* (DMR-8007248 A03*); 12 MONTHS \$30,000

MINNESOTA

BIO-METRIC SYSTEMS INC

CARLSON, ROBERT E. *ENZYME/ANTIBODY IMMOBILIZATION USING PHOTOREACTIVE POLY (ETHYLENE GLYCOL) DERIVATIVES* (BNS-8260286*); 6 MONTHS \$29,917

GUIRE, PATRICK E. *FUNCTIONAL STABILIZATION OF ENZYMES AND RECEPTOR PROTEINS* (CPE-8260563*); 6 MONTHS \$29,995

UNIVERSITY OF MINNESOTA-INSTITUTE OF TECHNOLOGY

BRYANT, ROBERT G. *INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH PROJECT: NMR DISPERSION EQUIPMENT AND APPLICATIONS* (PCM-8106054*); 12 MONTHS \$25,000

UNIVERSITY OF MINNESOTA

MACOSKO, CHRIS W. *INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: POLYURETHANE REACTION INJECTION MOLDING* (CPE-8118232*); 12 MONTHS \$74,780

MISSOURI

ENERTRONICS RESEARCH INC

WANG, DOUGLAS. *A GENERALIZED P-VERSION FINITE ELEMENT SOLVER FOR FOURTH ORDER TWO-DIMENSIONAL PDE'S IN A COMPUTER SYSTEM WITH LIMITED RESOURCES* (MCS-8260594*); 6 MONTHS \$30,000

UNIVERSITY OF MISSOURI, ROLLA

O KEEFE, THOMAS J. AND JAMES, WILLIAM J. *INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: ROLE OF TRACE ELEMENTS AND ADDITIVES IN NON-FERROUS ELECTROLYTIC PROCESSING* (CPE-8004272 A02*); 12 MONTHS \$44,106

WASHINGTON UNIVERSITY

YARIS, ROBERT, AND SCHAEFER, JACOB F. *INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: RELAXATION STUDIES ON GLASSY POLYMERS* (DMR-8007025 A02*); 12 MONTHS \$34,500

NEW HAMPSHIRE

CONSERVATION TECHNOLOGY INTERNATIONAL CORP

WENTWORTH, FRED A. *AUGMENTATION OF GAS PHASE COMBUSTION BY BUBBLING COMBUSTION AIR THROUGH H₂O* (MEA-8260261*); 6 MONTHS \$30,000

VERAX CORPORATION

DEAN, ROBERT C. *LONG-LIFE CATALYSTS FOR IMMOBILIZED MICRO-ORGANISM FERMENTORS* (CPE-8260166*); 6 MONTHS \$29,881

NEW JERSEY

ALPINE KINETICS INC

CHUNG, CHAO-JEN. *ENRICHMENT AND SEPARATION OF ISOTOPES UTILIZING A NOVEL MAGNETIC ISOTOPE EFFECT* (CPE-8260153*); 6 MONTHS \$29,925

CHRONAR CORPORATION

DALAL, VIKRAM. *HIGH YIELD SYNTHESIS OF PURE DISILANE* (CHE-8260603*); 6 MONTHS \$29,700

ELECTROANALYTICAL CONSULTING ASSOCIATES

SOONG, FUCHIN. *SOFTWARE CELL DEVELOPMENT FOR AIEMANN-LIOUVILLE TRANSFORM POLAROGRAPHY* (CHE-8260649*); 6 MONTHS \$30,000

INNOVATIVE SYSTEMS RESEARCH INC

PARIS, ALAN A. *A NATURAL EXPERIMENT ON FEDERAL INCENTIVES TO STIMULATE APPLICATION OF R&D RESULTS* (ISI-7432241 A08); \$2,000

OSBORNE-HOFFMAN INC

HOFFMAN, EDWIN, AND OSBORNE, PAUL W. *ADVANCED UNDERWATER TELEMETRY AND VOICE LINKS FOR INLAND AND COASTAL WATERS RESEARCH* (ECS-8115710*); 24 MONTHS \$194,430

PRINCETON UNIVERSITY

PRUD'HOMME, ROBERT K. AND SMALL, HAMISH. *INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: FUNDAMENTALS AND APPLICATIONS OF HYDRODYNAMIC CHROMATOGRAPHIC SEPARATIONS* (CPE-8004320 A01*); 12 MONTHS \$30,167

ANDERSON, PHILIP W. AND STEIN, DANIEL L. *INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: APPLICATIONS OF MANY-BODY THEORY* (DMR-8020263 A01*); 12 MONTHS \$68,500

RUTGERS UNIVERSITY-NEWARK CAMPUS

AZUMI, KOYA. *TECHNICAL-MARKET CONTEXT, ORGANIZATION DESIGN, AND INDUSTRIAL INNOVATION* (ISI-8001156 A01); 6 MONTHS \$18,176

RUTGERS UNIVERSITY

MCLAREN, MALCOLM G. *ESTABLISHMENT OF A CENTER FOR CERAMIC RESEARCH* (ISI-8211175); 12 MONTHS \$175,000

NEW YORK

ASSOCIATED BIOMEDIC SYSTEMS INC

MONTAGNA, RICHARD A. *PRODUCTION OF HUMAN MONOCLONAL ANTIBODIES BY CONTINUOUSLY PROLIFERATING B CELL-GROWTH-FACTOR-DEPENDENT HUMAN B-LYMPHO CYTES* (BNS-8260396*); 6 MONTHS \$29,501

COLD SPRING HARBOR LAB OF QUANTITATIVE BIOLOGY

ROBERTS, RICHARD J. *SEARCH FOR NEW RESTRICTION ENDONUCLEASES* (PCM-8011709 A02*); 12 MONTHS \$57,700

COLUMBIA UNIVERSITY

SCHWARTZ, MISCHA, AND STERN, THOMAS E. *INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH: DATA NETWORKS AND SATELLITE COMMUNICATIONS* (ECS-7925092 A02*); 12 MONTHS \$88,526

SOMASUNDARAN, PONISSERI, AND HALVERSON, FREDERICK. *INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: FLOCCULATION OF CLAYS* (CPE-8011013 A01*); 12 MONTHS \$149,000

CORNELL UNIVERSITY

MCLAFFERTY, FRED W. *COMPUTER IDENTIFICATION OF UNKNOWN MASS SPECTRA* (CHE-7910400 A02*); 12 MONTHS \$47,500

MAYER, JAMES W. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: BEAM INDUCED SURFACE ALLOYING (DMR-8106843*); 12 MONTHS \$40,000

CUNY GRADUATE SCHOOL AND UNIVERSITY CENTER

AUSLANDER, LOUIS. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: THE ALGORITHMS OF DIGITAL SIGNAL PROCESSING (ECS-7921291 A02*); 12 MONTHS \$32,300

ELECTROSYNTHESIS COMPANY

WEINBERG, NORMAN L. ELECTROSYNTHESIS OF POLYOLS FROM FORMALDEHYDE (CPE-8260013*); 6 MONTHS \$29,350

NEW YORK UNIVERSITY

GRISHMAN, RALPH. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: ROBUST NATURAL LANGUAGE PARSING USING GRADED ACCEPTABILITY (COMPUTER RESEARCH) (MCS-8202473*); 12 MONTHS \$5,000

NIAGARA SCIENTIFIC INC

BEER, SYLVAN L. INSTRUMENT FOR DETECTION OF LOW-LEVEL CONCENTRATION OF ETHYLENE OXIDE (CHEMISTRY) (CHE-8260632*); 6 MONTHS \$30,000

OCEAN POND CORPORATION

MATTHIESSEN, GEORGE C. ENRICHMENT OF BRACKISH WATER POND FOR SHELLFISH CULTURE (OCE-8260044*); 6 MONTHS \$29,113

POLYSYSTEMS ANALYSIS CORP

DRENICK, RUDOLF F. DECISION MAKING IN ADVANCED ROBOTIC SYSTEMS (ECS-8260172*); 6 MONTHS \$29,751

RENSSELAER POLYTECHNIC INSTITUTE

WOZNY, MICHAEL J. UNIVERSITY/INDUSTRY COOPERATIVE RESEARCH CENTER IN COMPUTER-AIDED DESIGN (ISI-7920240 A03); 12 MONTHS \$160,000

STATE UNIVERSITY AT ALBANY

GIBSON, WALTER M. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: ATOM LOCATION BY STANDING WAVE X-RAY INTERFEROMETRY (DMR-8017393 A01*); 12 MONTHS \$38,000

STATE UNIVERSITY AT BUFFALO

NANCOLLAS, GEORGE H. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: CRYSTALLIZATION AND DISSOLUTION OF FLUORIDE AND PHOSPHATE SALTS (CPE-8003445 A02*); 12 MONTHS \$74,000

UNIVERSITY OF ROCHESTER

WAAG, ROBERT C. AND LIU, C. N. NEW ULTRASOUND TISSUE PARAMETERS FOR IMPROVED IMAGING (ECS-8017683 A01*); 12 MONTHS \$110,592

KENKRE, V. M. AND DUKE, CHARLES B. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: CHARGE TRANSPORT IN MOLECULAR CRYSTALS (DMR-8111434*); 8 MONTHS \$24,200

NORTH CAROLINA

C ABACI INC

BATTISTE, EDWARD L. ROBUST SCIENTIFIC SOFTWARE FOR MICRO-COMPUTER USAGE (MCS-8260282*); 6 MONTHS \$30,000

DUKE UNIVERSITY

KRIGBAUM, WILLIAM R. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: PHYSICO-CHEMICAL STUDIES OF RODLIKE AND SEMI-FLEXIBLE CHAIN POLYMERS (DMR-8106160*); 12 MONTHS \$39,700

LEAF PROTEIN INTERNATIONAL INC

KWANYUEN, PRACHUAB. EFFECT OF DIFFERENT DRYING METHODS ON LEAF PROTEIN PROPERTIES (CPE-8260629*); 6 MONTHS \$25,000

MOUNT OLIVE PICKLE CO INC

MACON, JOHN A. REDUCED SODIUM REQUIREMENT FOR FERMENTED VEGETABLES (CPE-8260412*); 6 MONTHS \$29,550

NORTH CAROLINA STATE UNIVERSITY AT RALEIGH

HOPFENBERG, HAROLD B. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: TRANSPORT AND RELAXATION IN GLASSY POLYMERS (CPE-7920740 A01*); 12 MONTHS \$65,351

O'NEAL, J. B. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH CENTER FOR COMMUNICATIONS AND SIGNAL PROCESSING (ISI-8212696*); 12 MONTHS \$170,000

OHIO

CASE WESTERN RESERVE UNIVERSITY

HILTNER, ANNE. CENTER FOR APPLIED POLYMER RESEARCH (ISI-8116163 A01); 12 MONTHS \$210,000

DAYTON TINKER CORPORATION

GEELS, DANIEL P. AMORPHOUS IRON ELECTROFORMS FOR ENERGY SAVINGS (DMR-8260006*); 6 MONTHS \$30,000

HELIPUMP INC

BROWN, WILLIAM R. LIQUID CARBON DIOXIDE DEWATERING AT HIGH PRESSURES (CPE-8260660*); 6 MONTHS \$26,220

OHIO STATE UNIVERSITY

MC CAULEY, ROY B. ESTABLISHMENT OF A CENTER FOR WELDING RESEARCH (ISI-8018104 A03); 12 MONTHS \$240,000

TANNER, DAVID B. AND EPSTEIN, ARTHUR J. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: CONDUCTING POLYMERS: MAGNETIC, OPTICAL AND TRANSPORT STUDIES (DMR-8110422 A01*); 13 MONTHS \$44,000

PRENTKE ROMICH COMPANY

ROMICH, BARRY A. EXPLORATION OF MINIBUS ARCHITECTURE FOR COMMUNICATION AND CONTROL AIDS FOR SEVERELY HANDICAPPED INDIVIDUALS (ECS-8260413*); 6 MONTHS \$26,506

UNIVERSAL ENERGY SYSTEMS INC

PRONKO, PETER P. DEVELOPMENT OF ION BEAM PROCESSING FOR LASER MIRRORS (PHY-8260333*); 6 MONTHS \$29,881

UNIVERSITY OF CINCINNATI

BAKER, NORMAN R. A MULTIVARIATE ANALYSIS OF INDUSTRIAL R & D PROJECTS AND ITS IMPLICATIONS FOR POLICY ANALYSIS AND MANAGEMENT (ISI-7921581 A01); 9 MONTHS \$12,360

OKLAHOMA

UNIVERSITY OF OKLAHOMA NORMAN CAMPUS

JOHNSON, BONNIE M. THE PROCESS OF REINVENTION IN OFFICE AUTOMATION (ISI-8110791); 12 MONTHS \$84,841

UNIVERSITY OF TULSA

ARIMAN, TEOMAN, BERGMAN, WERNER, AND RUSEK, STANLEY. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: ELECTROSTATICALLY ENHANCED FIBROUS FILTRATION OF AEROSOLS (CPE-8101947 A01*); 12 MONTHS \$50,545

OREGON

BEND RESEARCH INC

BABCOCK, WALTER C. WASTEWATER TREATMENT WITH IMMOBILIZED LIQUID ION EXCHANGERS (CEE-8115633*); 12 MONTHS \$106,195

ROMAN, IAN C. OXYGEN PRODUCTION WITH NOVEL COMPLEXING AGENTS (CPE-8260450*); 6 MONTHS \$29,688

NEA INC

HOUCK, JAMES E. THE WARM WATER CULTURE OF THE CRAYFISH PACIFASTACUS LENIUSCULUS (ENVIRONMENTAL BIOLOGY) (DEB-8260705*); 6 MONTHS \$29,364

SCH OF EXPERIMENTAL ECOLOGY - AN OREGON CORP

GARCIA, JOHN D. DEVELOPMENT OF AN ELECTRONIC SIGNATURE LOCK FOR DATA SECURITY (MCS-8260703*); 6 MONTHS \$30,000

PENNSYLVANIA

BURROUGHS CORPORATION

HIRSCHMAN, LYNETTE. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: ROBUST NATURAL LANGUAGE PARSING USING GRADED ACCEPTABILITY (COMPUTER RESEARCH) (MCS-8202397*); 12 MONTHS \$4,206

CARNEGIE-MELLON UNIVERSITY

SIRIGNANO, WILLIAM A. AND CALCOTE, HARTWELL F. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: TURBULENT CHEMICALLY REACTING AXISYMMETRIC JETS (CPE-8014661 A02*); 12 MONTHS \$112,000

CASASSA, EDWARD F. AND BERRY, GUY C. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: SOLUTIONS OF WATER-SOLUBLE POLYMERS (DMR-8023213 A01*); 12 MONTHS \$33,800

LAWLESS, JOHN. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH PROJECTS: THERMIONIC ENERGY CONVERSION LASER FEASIBILITY INVESTIGATION (CPE-8204813*); 12 MONTHS \$19,789

CERAMIC FINISHING COMPANY

KIRCHNER, HENRY P. TOUGHENED CERAMIC ADHESIVES FOR STRUCTURAL CERAMICS (DMR-8120614*); 24 MONTHS \$107,000

COAL TECH CORP

ZAUDERER, BERT. SULFUR CAPTURE WITH LIMESTONE INJECTION IN CYCLONE COMBUSTION FLOW (CPE-8260265*); 6 MONTHS \$28,037

DREXEL UNIVERSITY

KOERNER, ROBERT M. AND LEAIRD, JAMES D. INDUSTRY/UNIVERSITY COOPERATION RESEARCH: ACOUSTIC EMISSION MONITORING OF SEEPAGE, GROUTING, AND HYDROFRACTURING FRONTS IN INSITU GEOLOGICAL MATERIALS (CEE-8108178*); 12 MONTHS \$30,000

CHAKRABARTI, ALOK K. AN EXPLORATORY STUDY OF TECHNOLOGICAL INNOVATION IN ORGANIZATIONS AFTER MERGER/ACQUISITION: PHASE I (ISI-8212971); 6 MONTHS \$21,324

LEHIGH UNIVERSITY

LEVY, EDWARD K. AND KADAMBI, VEDANTH. HEAT TRANSFER IN ROTATING AND CURVED DUCTS (MECHANICAL ENGINEERING) (MEA-792751 A02*); 12 MONTHS \$79,238

WALKER, J. D. AND SMITH, CHARLES R. INDUSTRY/UNIVERSITY COOPERATIVE GRANT: SEPARATED FLOW EFFECTS ON THE TURBINE BLADE HEAT TRANSFER (MEA-8016829 A01*); 12 MONTHS \$100,000

BLTYHE, PHILIP A. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH: THERMAL CONVECTION IN CAVITIES WITH APPLICATIONS TO CRYSTAL GROWTH AND OTHER PROBLEMS (MEA-8115333*); 12 MONTHS \$18,187

PENNSYLVANIA STATE UNIVERSITY

VANNICE, M. ALBERT, AND GEOFFROY, GREGORY L. THE PREPARATION, SINTERING, AND CATALYTIC BEHAVIOR OF SUPPORTED SILVER CATALYSTS (CPE-8019968 A01*); 12 MONTHS \$40,663

DAS, MUKUNDA B. L/UCRA: AN EXPER STUDY FOR THE CHARACTERIZATION OF DEFECTS AND IMPERFECTIONS IN GAAS FIELD-EFFECT

TRANSISTORS WITH EMPH. ON THEIR ORIGIN IN MATERIALS AND PROCESSING (ECS-8103737*); 24 MONTHS \$54,618

APLAN, FRANK F. AND KLIMPEL, RICHARD R. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: THE EVALUATION OF FLotation COLLECTING AGENTS IN THE LABORATORY AND IN INDUSTRIAL MILLING OPERATIONS (CPE-8111792*); 12 MONTHS \$44,500

BIGGERS, JAMES V. PLANNING RELATED TO ESTABLISHMENT OF A CENTER FOR DIELECTRIC STUDIES (ISI-8211489); 12 MONTHS \$75,000

SUPREX CORPORATION

HOUCK, RAYMOND K. SEPARATION OF NATURAL COLORANTS USING SUPERCRITICAL FLUIDS (CPE-8260733*); 6 MONTHS \$30,000

TARTAN LABORATORIES INC

NESTOR, JOHN R. EXTENSIONS TO ATTRIBUTE GRAMMARS (COMPUTER LANGUAGES) (MCS-8260633*); 6 MONTHS \$30,000

UNIVERSITY OF PITTSBURGH

HERCULES, DAVID M. INDUSTRY/UNIVERSITY COOPERATIVE ACTIVITY: INVESTIGATIONS INVOLVING A NOVEL CLASS OF SUPPORTED METAL CATALYSIS (CHEMISTRY) (CHE-8020001 A01*); 12 MONTHS \$45,500

SOFFA, WILLIAM A. AND BRENNER, S S. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: ATOM PROBE FIELD ION MICROSCOPY STUDIES OF CONTINUOUS TRANSFORMATIONS IN ALLOYS (DMR-8022225 A01*); 12 MONTHS \$70,400

WESTINGHOUSE ELECTRIC CORPORATION

MCNAB, IAN R. HUGHES, WILLIAM F. AND WALKER, JOHN S. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: HIGH INTERACTION PARAMETER MAGNETOFLUID DYNAMIC STUDIES IN LIQUID METAL FLOWS (CPE-8108952*); 12 MONTHS \$75,496

PUERTO RICO

UNIVERSITY OF PUERTO RICO, RIO PIEDRAS

BLUM, LESSER. STATISTICAL MECHANICS OF THE ELECTRIC DOUBLE LAYER (CHEMISTRY) (CHE-8001969 A02*); 12 MONTHS \$44,700

RHODE ISLAND

BROWN UNIVERSITY

SWEIGART, DWIGHT A. AND ITTEL, SREPHEN D. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: NUCLEOPHILIC ADDITION TO CYCLIC HYDROCARBONS (CHE-8023964 A01*); 12 MONTHS \$32,000

WOLD, AARON, AND BAGLIO, JOSEPH. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: PREPARATION AND CHARACTERIZATION OF NEW SEMICONDUCTOR CHALCOGENIDES FOR POTENTIAL SOLAR CELL APPLICATIONS (DMR-8203667*); 12 MONTHS \$20,000

NEW ENGLAND INNOVATION GROUP

MACFARLANE, MARJORIE. IPA MOBILITY ASSIGNMENT (ISI-8215527); 12 MONTHS \$5,000

UNIVERSITY OF RHODE ISLAND

ESTRIN, JOSEPH, AND TADROS, MAHER K. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: THE MECHANISMS OF GROWTH AND MORPHOLOGICAL STABILITY OF SPARINGLY SOLUBLE SALTS (CPE-8018110 A02*); 12 MONTHS \$53,000

KELLEY, ROBERT E. UNIVERSITY/INDUSTRY COOPERATIVE RESEARCH CENTER IN ROBOTICS (011-8205370*); 12 MONTHS \$98,000

TEXAS

BAYLOR COLLEGE OF MEDICINE

SCHRADER, WILLIAM T. PROGESTERONE RECEPTOR BINDING SITE: THREE DIMENSIONAL STRUCTURE (PCM-8111003*); 12 MONTHS \$35,000

MESSINA INCORPORATED

CHANNELL, HARVEY. DERIVATIVES OF LIGNIN FOR USE IN WELL DRILLING FLUIDS (CPE-8260766*); 6 MONTHS \$25,000

R F MONOLITHICS INC

HARTMANN, CLINTON S. AND KANSY, ROBERT. EXPERIMENTAL AND THEORETICAL RESEARCH ON AN INNOVATIVE UNIDIRECTIONAL SURFACE ACOUSTIC WAVE TRANSDUCER (ECS-8116654*); 12 MONTHS \$127,723

RICE UNIVERSITY

DENNIS, JOHN E. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH PROJECT: NONLINEAR EXPONENTIAL FAMILY AND BOUNDED-INFLUENCE REGRESSION (MCS-8116779*); 12 MONTHS \$16,968

TEXAS A & M UNIVERSITY

BOCKRIS, JOHN O. INDUSTRY/UNIVERSITY CENTER FOR HYDROGEN TECHNOLOGY (ISI-8205067*); 9 MONTHS \$59,393

UNIVERSITY OF HOUSTON CENTRAL CAMPUS

JACKSON, ROY, AND GWYN, JOHN E. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: THE MECHANICS OF FLOW OF PARTICULATE MEDIA (CPE-8011268 A01*); 12 MONTHS \$34,400

UTAH

BONNEVILLE SCIENTIFIC

GRAHN, ALLEN R. ROBOTIC FORCE SENSOR ARRAYS (ECS-8260604*); 6 MONTHS \$30,000

CERAMATEC INC

GORDON, RONALD S. AND MILLER, GERALD R. ELECTROWINNING AND REFINING OF METALLIC SODIUM USING STATE RAPID ION CONDUCTORS (CPE-8115704*); 24 MONTHS \$199,524

LESSING, PAUL A. FABRICATION OF SICALON CERAMICS (DMR-8260088*); 6 MONTHS \$29,898

NATIVE PLANTS INC

KING, GRETCHEN. PRODUCTION OF N₂-FIXING INOCULUM FOR NON-AGRICULTURAL USE (PCM-8260159*); 6 MONTHS \$29,951

PLANT RESOURCES INSTITUTE

SORENSEN, DEAN. MONOCLONAL ANTIBODIES AS TOOLS FOR MAPPING GENETIC DIVERSITY IN PLANTS (BNS-8260178*); 6 MONTHS \$29,957

ROGERS & ASSOCIATES ENGINEERING CORPORATION

NIELSON, KIRK K. A DIRECT METHOD FOR QUANTITATIVE X-RAY FLOURESCENCE ANALYSIS (CHE-8260151*); 6 MONTHS \$29,971

TERRA TEK INC

SCHATZ, JOHN F. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH PROJECT: INELASTIC RESPONSE OF FLUID-FILLED POROUS MATERIALS (SOLID MECHANICS AND MECHANICAL ENGINEERING) (MEA-8213134*); 12 MONTHS \$32,833

CUTLER, RAYMOND A. SYNTHESIS AND DENSIFICATION OF CERAMICS MADE BY NOVEL EXOTHERMIC REACTIONS (DMR-8260430*); 6 MONTHS \$30,000

CUTLER, RAYMOND A. DISPERSION STRENGTHENING OF CEMENTED CARBIDES (DMR-8260468*); 6 MONTHS \$30,000

UNIVERSITY OF UTAH

RUSHFORTH, CRAIG K. RUSHFORTH, CRAIG K. AND LEIF, ROBERT C. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: RESONANT SCATTERING FOR CHARACTERIZATION OF DIELECTRIC PARTICULATES AND MULTICOMPONENT SYSTEMS (CPE-8116087*); 12 MONTHS \$24,211

SOHN, H Y. AND RICHARDS, K J. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: A FUNDAMENTAL INVESTIGATION OF FLASH SMELTING PROCESSES (CPE-8204280*); 12 MONTHS \$39,598

VIRGINIA

EAR THREE SYSTEMS

DUBRUQU, DENYSE C. SPEECH SIMULATION APPLICATIONS FOR PRELINGUALLY DEAF INDIVIDUALS (ECS-8260593*); 6 MONTHS \$30,000

EJY INC

YADLOWSKY, EDWARD J. LASER MACHINING AND WELDING OF AMORPHOUS ALLOYS (MEA-8260234*); 6 MONTHS \$28,970

GEORGE MASON UNIVERSITY

WETMORE, WILLIAM. IPA MOBILITY ASSIGNMENT (061-8206594*); 12 MONTHS \$26,200

GREENBRIAR SYSTEMS INC

CLEVELAND, DIXON. ACOUSTIC EMISSION SPOT WELD MONITOR (MEA-8260345*); 6 MONTHS \$30,000

MRJ INC

HWANGBO, HAN. HIGH FLUX HEAT EXCHANGER BY MEANS OF VAPOR CONDENSATION, CAPILLARY FLOW AND SUCTION DRAINING (MEA-8260032*); 6 MONTHS \$30,000

TECHNICS INC

BARR, ROBERT W. PLASMA DESMEARING OF CIRCUIT BOARDS (CPE-8260502*); 6 MONTHS \$28,740

UNIVERSITY OF VIRGINIA

JOHNSON, ROBERT E. AND BORING, JOHN W. EROSION OF CONDENSED GASES BY FAST IONS: PHYSICAL MECHANISMS AND ASTROPHYSICAL IMPLICATIONS (INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH PROJECT) (AST-8200477*); 12 MONTHS \$25,900

WASHINGTON

BOEING ENGINEERING AND CONSTRUCTION

LYTLE, FARREL W. AND SANDSTROM, DONALD R. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: EXAFS INVESTIGATION OF SUPPORT EFFECTS, CHEMISORPTION AND SURFACE DISORDER IN CATALYSIS (CHE-7918084 A02*); 12 MONTHS \$45,609

FLUIDDYNE CORPORATION

YIE, GENE G. HARD ROCK CUTTING WITH ABRASION JETS (CEE-8260224*); 6 MONTHS \$30,000

LODEC INC

HOOD, ROBERT B. MICROPROCESSOR BASED TRANSDUCER ELECTRONICS (MEA-8260306*); 6 MONTHS \$29,000

MATHEMATICAL SCIENCES NORTHWEST INC

GROSSMAN, WILLIAM M. HOLOGRAPHIC INTERFEROMETER USING A REAL-TIME NONLINEAR STORAGE MEDIUM (DMR-8260279*); 6 MONTHS \$29,971

R&A PLANT/SOIL INC

METTING, BLAINE. BIOPOLYMERS FROM PALMELLOID MICROALGAE: PHASE I - LABORATORY EVALUATION OF PRODUCTION POTENTIAL AND VISCOSITY PROPERTIES (CPE-8260768*); 6 MONTHS \$16,745

UNIVERSITY OF WASHINGTON

WISSMAR, ROBERT C. SIMENSTAD, CHARLES A. AND EGGERS, DOUGLAS M. OPTIMAL MANAGEMENT OF CHUM SALMON (OCE-8008637 A03*); 12 MONTHS \$43,880

SEFERIS, JAMES C. AND VASSILATOS, GEORGE. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: A STRUCTURAL APPROACH

TO CRYSTALLINE POLYMER ANISOTROPIC SOLID-STATE PROPERTIES (DMR-8113239 A01*); \$6,900

WISCONSIN

DAIRYLAND FOOD LABORATORIES INC

MOSKOWITZ, GERARD J. ISOLATION OF BOVINE PROCHYMOSIN EXPRESSED BY A CDNA FRAGMENT IN *E. COLI* OR *S. CEREVISIAE* (PCM-8260580*); 6 MONTHS \$28,872

INCELL CORPORATION

BAYNE, PETER D. ENZYMATIC TRANSFORMATION OF SYNTHETIC RACEMIC INTERMEDIATES TO L-TRYPTOPHAN (CPE-8260578*); 6 MONTHS \$29,896

LAKESHORE GROUP LTD

KOMIVES, JOHN L. SUPPORT SERVICES FOR TWO SMALL BUSINESS CONFERENCES (ISI-8101825 A01); 5 MONTHS \$50,000

UNICO INC

HAMMEL, WILLIAM S. AN ELECTROMAGNETIC SHEAR FOR HIGH SPEED PROCESSING OF SHEET METALS (MEA-8260263*); 6 MONTHS \$30,000

UNIVERSITY OF WISCONSIN-MADISON

CHANG, Y. AUSTIN. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: PHASE INVESTIGATION OF LEAD-TIN-CALCIUM ALLOYS (DMR-7908333 A02*); 12 MONTHS \$41,700

LUND, DARYL B. AND CHAPMAN, THOMAS W. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: FOULING OF HEAT TRANSFER SURFACES IN FOOD PROCESSING SYSTEMS (CPE-8020627 A01*); 12 MONTHS \$30,594

DUMESIC, JAMES A. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: GEOMETRICALLY DESIGNED CATALYSTS IN THE STUDY OF MULTI-COMPONENT CATALYSIS (CPE-8121717*); 12 MONTHS \$48,000

HONG, RICHARD. PLANNING FOR AN INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH CENTER IN HYBRIDOMA TECHNOLOGY (ISI-8213492*); 12 MONTHS \$45,427

UNIVERSITY OF WISCONSIN-MILWAUKEE

LEVY, MOISE. INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: INVESTIGATION OF MAGNETIC FILMS FOR DEVELOPMENT OF VARIABLE AMPLITUDE AND FREQUENCY SAW FILTERS (ECS-8001773 A02*); 12 MONTHS \$49,995

POLICY RESEARCH AND ANALYSIS

ARIZONA

UNIVERSITY OF ARIZONA

POSTER, KENNETH E. A TECHNOLOGY ASSESSMENT OF THE COMMERCIALIZATION OF MEXICAN GUAYULE (PRA-8007498 A01); 6 MONTHS \$9,288

CALIFORNIA

CALIFORNIA INSTITUTE OF TECHNOLOGY

PAGE, R. TALBOT, AND FERREJOHN, JOHN A. FUNDAMENTAL ISSUES IN APPLYING RISK ANALYSIS TECHNIQUES TO COMPLEX PROBLEMS (PRA-8114463); 12 MONTHS \$83,575

J H WIGGINS COMPANY

ATKISSON, ARTHUR A. AND PHILIPSON, LLOYD L. AN EXPLORATORY TARGET ANALYSIS AND COMPARISON OF RISK REDUCTION POLICIES (PRA-8118097); 12 MONTHS \$49,504

PERCEPTONICS INC

SLOVIC, PAUL. RISK/BENEFIT PERCEPTIONS AND RISK ASSESSMENT (PRA-8116925); 12 MONTHS \$120,059

UNIVERSITY OF CALIFORNIA, BERKELEY

WILTON, PETER C. AND MYERS, JOHN G. RESEARCH ON THE UTILIZATION OF TECHNOLOGY ASSESSMENT INFORMATION (PRA-8110052 A01); 18 MONTHS \$100,000

UNIVERSITY OF CALIFORNIA, SAN DIEGO

GROBSTEIN, CLIFFORD. AN ASSESSMENT OF THE IMPACTS OF NEWER GENETIC AND DEVELOPMENTAL KNOWLEDGE (PRA-8020679 A01); 12 MONTHS \$118,820

UNIVERSITY OF SOUTHERN CALIFORNIA

EDWARDS, WARD, AND WINTERFELDT, DETLOF V. TOWARD DEVELOPING METHODS FOR UNDERSTANDING PUBLIC RESPONSES TO RISKY TECHNOLOGIES (PRA-8108638 A01); 12 MONTHS \$100,000

WOODWARD-CLYDE CONSULTANTS INC

KEENEY, RALPH L. RISK EVALUATION AND POLICY (PRA-8107319 A01); 12 MONTHS \$48,826

CONNECTICUT

YALE UNIVERSITY

STOLWIJK, JAN A. GOULD, LEROY C. AND DELUCA, DONALD R. PUBLIC PERCEPTIONS OF TECHNOLOGICAL RISKS: A METHODOLOGICAL STUDY (PRA-8014194 A01); 6 MONTHS \$100,000

LEVIN, RICHARD C. DYNAMIC COMPETITION: A PROGRAM OF RESEARCH ON TECHNOLOGICAL CHANGE AND MARKET STRUCTURE (PRA-8019779 A01*); 12 MONTHS \$124,812

DISTRICT OF COLUMBIA

BROOKINGS INSTITUTION

LAVE, LESTER B. MANAGING HEALTH AND SAFETY RISKS (PRA-8116124); 24 MONTHS \$162,768

LAVE, LESTER B. USA-FEDERAL REPUBLIC OF GERMANY JOINT WORKSHOP ON MANAGEMENT OF RISK (PRA-8204319*); 10 MONTHS \$19,197

BRYANT, RALPH. U.S. OPTIONS FOR MODIFYING THE INTERNATIONAL MONETARY SYSTEM (PRA-8211924); 12 MONTHS \$277,706

GEORGE WASHINGTON UNIVERSITY

LOGSDON, JOHN M. SCIENCE AND TECHNOLOGY POLICY SEMINAR SERIES (PRA-8120502*); 12 MONTHS \$56,382

NATIONAL ACADEMY OF SCIENCES

PERRY, SUSAN C. AND NAFTALIN, MICHAEL H. A REPORT ON SELECTED ISSUES IN SCIENCE AND TECHNOLOGY, AND THEIR LONG-RANGE IMPLICATIONS (PRM-8206308); 12 MONTHS \$110,000

NATIONAL PLANNING ASSOCIATION

TERLECKYJ, NESTOR E. MEASURING THE ECONOMIC IMPACT OF GOVERNMENT R & D (PRA-8118098); 12 MONTHS \$58,534

HAWAII

CENTER FOR CULTURAL & TECH INTERCHG EAST&WEST-EAST-WEST

RANDOLPH, ROBERT, AND KOPPEL, BRUCE. A TECHNOLOGY ASSESSMENT OF BIOLOGICAL NITROGEN FIXATION (PRA-8021354 A01); \$100,000

ILLINOIS

NORTHWESTERN UNIVERSITY

CULHANE, PAUL J. AND FRIESEMA, H. PAUL. A STUDY OF THE PRECISION OF ENVIRONMENTAL IMPACT ASSESSMENT (PRA-8119299); 18 MONTHS \$128,864

EISNER, ROBERT. TAX INCENTIVES AND INVESTMENT IN RESEARCH AND DEVELOPMENT (PRA-8209445); 24 MONTHS \$20,000

UNIVERSITY OF ILLINOIS AT URBANA

EHEART, J. WAYLAND. METHODS OF ANALYSIS AND ASSESSMENT FOR TRANSFERABLE DISCHARGE PERMITS FOR MULTIPLE POLLUTANTS AND DYNAMIC CONDITIONS (PRA-8121692); 24 MONTHS \$143,175

INDIANA

PURDUE UNIVERSITY

JACOBY, JACOB H. AND JACCARD, JAMES J. ASSESSING THE EFFECTS OF SCIENCE-BASED INFORMATION ON CONSUMER TECHNOLOGICAL CHOICES (PRA-7920585 A02*); \$7,559

MARYLAND

CAPITAL SYSTEMS GROUP INC

CLANSKY, KENNETH B. SUPPORT SERVICES FOR RESEARCH INFORMATION PROCESSING DISSEMINATION PROGRAMS (06M-8020049 A03*); 12 MONTHS \$80,811

CLANSKY, KENNETH B. SUPPORT SERVICES FOR RESEARCH INFORMATION PROCESSING AND DISSEMINATION PROGRAMS (PRM-8020049 A05*); \$25,724

CLANSKY, KENNETH B. SUPPORT SERVICES FOR RESEARCH INFORMATION PROCESSING AND DISSEMINATION PROGRAMS (PRM-8020049 A06*); \$15,088

SEVERN GRAPHICS INC

ELCHIN, GEORGE. GRAPHIC ARTS SERVICES (PRM-8122154 A02); \$2,000

MASSACHUSETTS

ARTHUR D LITTLE INC

GLASER, PETER E. FEDERAL POLICY AND MACROENGINEERING FOR ENERGY (PRA-8117651); 12 MONTHS \$149,685

BRACKEN AND BARAM

BARAM, MICHAEL S. AND MIYARES, J. RAYMOND. AN EXPLORATORY ASSESSMENT OF INSURANCE FOR MANAGING RISKS TO HEALTH, SAFETY AND ENVIRONMENT (PRA-8116657); 6 MONTHS \$49,280

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

ROSE, DAVID J. MILLER, MARVIN M. AND HILL, CHRISTOPH T. CONSEQUENCES OF CARBON DIOXIDE/CLIMATE CHANGE FOR U.S. ENERGY POLICY (PRA-8206113); 12 MONTHS \$146,139

NATIONAL BUREAU OF ECONOMIC RESEARCH INC

GRILICHES, ZVI, AND NADIRI, M. ISHAQ. R AND D PATENTS AND THE PRIVATE AND SOCIAL VALUE OF KNOWLEDGE (PRA-8108635 A01); 12 MONTHS \$300,000

GRILICHES, ZVI, AND NADIRI, M. ISHAQ. R&D, PATENTS AND THE PRIVATE AND SOCIAL VALUE OF KNOWLEDGE (PRA-8108635 A02*); 1 MONTHS \$29,444

BRANSON, WILLIAM H. AND RICHARDSON, J. DAVID. U.S. TRADE POLICY, COMPETITIVENESS, AND CAPITAL MOBILITY IN THE WORLD ECONOMY (PRA-8211940); 12 MONTHS \$274,938

MICHIGAN

UNIVERSITY OF MICHIGAN-ANN ARBOR

OLEINICK, ARTHUR. FEDERAL JUDICIAL REVIEW OF AGENCY RISK REDUCTION STANDARDS (PRA-8114693); 12 MONTHS \$70,940

NEW JERSEY

COMPUTER HORIZONS INC

CARPENTER, MARK P. TEN YEAR TRENDS IN U.S. TECHNOLOGICAL DEPENDENCE ON FOREIGN SCIENCE AND TECHNOLOGY AS INDICATED BY REFERENCING FROM U.S. PATENTS (PRA-8118601 A01); 16 MONTHS \$146,385

NEW YORK

NEW YORK UNIVERSITY

ZIMMERMAN, RAE. THE MANAGEMENT OF RISK: AN ORGANIZATION THEORETIC APPROACH (PRA-8012732 A01); 6 MONTHS \$3,930

STATE UNIVERSITY AT ALBANY

JACCARD, JAMES J. THE INFLUENCE OF HEALTH AND SAFETY INFORMATION ON CONSUMER DECISION MAKING CONCERNING NEW TECHNOLOGICAL PRODUCTS (PRA-8215751); 9 MONTHS \$146,992

UNIVERSITY OF ROCHESTER

JONDROW, JAMES M. THE EFFECT OF REGULATION ON PRODUCTIVITY GROWTH (PRA-7914443 A01); 9 MONTHS \$95,800

OHIO

UNIVERSITY OF DAYTON

MARTINO, JOSEPH P. WORKSHOP ON POLICY ISSUES RELATED TO DIRECT BROADCAST SATELLITES (PRA-8114838); 12 MONTHS \$50,917

PENNSYLVANIA

CARNEGIE-MELLON UNIVERSITY

MORGAN, M. GRANGER. TECHNOLOGICAL UNCERTAINTY IN POLICY ANALYSIS: TECHNIQUES FOR ESTIMATING HEALTH IMPACTS FROM COAL FIRED POWER PLANTS (PRA-7913070 A01); 6 MONTHS \$23,390

RUBIN, EDWARD S. EXTENSION OF MULTI-ATTRIBUTE UTILITY THEORY TO THE ASSESSMENT OF ENVIRONMENTAL AND ECONOMIC TRADEOFFS IN REGULATORY POLICIES FOR SYNTHETIC FUEL PROCESSES (PRA-8115523 A01); \$120,000

UNIVERSITY OF PENNSYLVANIA

MANSFIELD, EDWIN. STUDIES OF TAX POLICY, INNOVATION, AND PATENTS (PRA-8119194); 32 MONTHS \$199,962

VIRGINIA

DECISION SCIENCE CONSORTIUM INC

BROWN, REX V. INSTITUTIONAL INFLUENCES ON PUBLIC POLICY FOR RISK MANAGEMENT PHASE 1 - CONCEPTUAL DEVELOPMENT (PRA-8212159); 3 MONTHS \$11,977

KAPPA SYSTEMS INC

DARNELL, WILLIAM G. EXTERNAL PRODUCT EVALUATION MANAGEMENT (PRA-7726721 A09); \$3,412

HERSEY, JAMES C. CONTINUATION AND IMPROVEMENT OF THE EXTERNAL PRODUCT EVALUATION SYSTEM (PRA-8007241 A06); 3 MONTHS \$11,999

MITRE CORPORATION-MITRE CORPORATION-VIRGINIA

GSELLMAN, LARRY. SURVEY, REVIEW AND ANALYSIS OF CURRENT INFORMATION CONCERNING THE DEVELOPMENT AND UTILIZATION OF WESTERN COAL (PRA-7515002 A01); 12 MONTHS \$2,225

LAY, RODNEY K. EXPLORING THE UTILITY OF A STAGED TECHNOLOGY ASSESSMENT PROCESS (PRA-8201177*); 18 MONTHS \$30,000

WASHINGTON

BATTELLE MEMORIAL INSTITUTE-BATTELLE HUMAN AFFAIRS RESEARCH CENTERS

JACCARD, JAMES J. THE INFLUENCE OF HEALTH AND SAFETY INFORMATION ON CONSUMER DECISION MAKING CONCERNING NEW TECHNOLOGICAL PRODUCTS (PRA-8205708); 18 MONTHS \$182,260

SCIENCE RESOURCES STUDIES

CALIFORNIA

RAND CORPORATION

ALEXANDER, ARTHUR. MEASURING TECHNICAL CHANGE THROUGH PRODUCT ATTRIBUTES (SRS-8204052); 12 MONTHS \$99,131

DISTRICT OF COLUMBIA

AMERICAN COUNCIL ON EDUCATION

ATELSEK, FRANK J. HIGHER EDUCATION PANEL (SRS-8117047); 12 MONTHS \$99,751

BUREAU OF LABOR STATISTICS

MACDONALD, BRIAN. DEVELOPING ANNUAL ESTIMATES OF EMPLOYMENT OF SCIENTISTS, ENGINEERS AND TECHNICIANS IN TRADE AND REGULATED INDUSTRIES (SRS-7906682 A03); 12 MONTHS \$160,000

MOSHMAN ASSOCIATES INC

DE PAUL, BARBARA. DATA PROCESSING FOR FEDERAL FUNDS FOR RESEARCH AND DEVELOPMENT: FISCAL YEARS 1981, 1982, AND 1983, VOLUME XXXI (SRS-8014710 A 2); 12 MONTHS \$39,942

NATIONAL ACADEMY OF SCIENCES

SYVERSON, PETER D. THE DOCTORATE SURVEY (SRS-8112839 A01); \$82,730

MAXFIELD, BETTY D. PRODUCTION, ANALYSIS, AND DEVELOPMENT ACTIVITIES OF THE SURVEY OF DOCTORATE RECIPIENTS (SRS-8120696); 12 MONTHS \$142,700

PATENT OFFICE

MYERS, JANE S. PATENTING TRENDS IN THE UNITED STATES AND OTHER COUNTRIES II (SRS-8210401); 6 MONTHS \$26,430

ILLINOIS

MARKET FACTS INC

WEBER, STEPHEN J. A RAPID INDUSTRY LIMITED RESPONSE SURVEY PANEL FOR SCIENTIFIC AND TECHNICAL PERSONNEL RESOURCES (SRS-8025001 A03); 8 MONTHS \$63,523

INDIANA

PURDUE UNIVERSITY

COOKE, WILLIAM N. MARKET ADJUSTMENTS BY SCIENTISTS AND ENGINEERS: A LONGITUDINAL ANALYSIS (SRS-8202491); 6 MONTHS \$13,699

MARYLAND

BUREAU OF THE CENSUS

LEVINE, DANIEL B. CONDUCT OF THE 1982 POSTCENSAL SURVEY OF SCIENTISTS AND ENGINEERS (SRS-8110921 A02); 12 MONTHS \$750,000

KALLEK, SHIRLEY. SURVEY OF RESEARCH AND DEVELOPMENT IN INDUSTRY (SRS-8206078); 12 MONTHS \$170,000

BUGENHAGEN, ROGER H. SURVEY OF RESEARCH AND DEVELOPMENT IN INDUSTRY (SRS-8206078 A01); \$15,000

LEHMAN-SCAFFA ART & PHOTOGRAPHY INC

SCAFFA, ANTHONY R. GRAPHIC ARTS SERVICES (PRM-8122155 A02*); \$8,500

NATIONAL INSTITUTES OF HEALTH

JUENEMANN, HENRY. AGREEMENT FOR USE OF NATIONAL INSTITUTES OF HEALTH COMPUTER FACILITIES (SRS-8200749); 12 MONTHS \$15,000

UNIVERSITY OF MARYLAND, COLLEGE PARK

DUNSON, BRUCE H. AMENDMENT TO IPA MOBILITY ASSIGNMENT (SRS-8119390 A01); 1 MONTHS \$2,977

WESTAT INC

HODES, LANCE. NSF BASELINE SURVEY OF RESEARCH INSTRUMENTS IN ACADEMIC SETTINGS (SRS-8017873 A05*); 36 MONTHS \$200,183

MASSACHUSETTS

ABT ASSOCIATES INC

BOESEL, DAVID. DATA PROCESSING OF FOUR NSF UNIVERSITY SYSTEMS, FY 1982 (SRS-8121817); 12 MONTHS \$175,000

MACMILLAN, JEAN. DATA PROCESSING OF FOUR NSF UNIVERSITY SYSTEMS, FY 1982 (SRS-8121817 A01); \$52,000

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

HILL, CHRISTOPH T. ASSESSING THE FEASIBILITY OF NEW SCIENCE AND TECHNOLOGY INDICATORS: PHASE II (SRS-8111862 A01); 7 MONTHS \$83,064

NEW JERSEY

EDUCATIONAL TESTING SERVICE

HARTNETT, RODNEY T. COMPARATIVE TRENDS IN ACADEMIC ABILITIES OF DOCTORATE SCIENTISTS, ENGINEERS AND OTHER PROFESSIONS (SRS-8202697); 12 MONTHS \$87,528

NEW YORK

NEW YORK UNIVERSITY

SAHAL, DEVENDRA. THE MEASUREMENT OF TECHNOLOGICAL CHANGE (SRS-8203783); 12 MONTHS \$99,475

UNIVERSITY OF ROCHESTER

QUESTER, ALINE O. COMPARISONS OF TASKS AND EARNINGS OF SCIENTISTS AND ENGINEERS (SRS-8213881); 15 MONTHS \$70,635

OHIO

UNIVERSITY OF DAYTON

MARTINO, JOSEPH P. DEVELOPING MEASURES OF TECHNOLOGICAL PROGRESS IN TERMS OF TRADEOFF SURFACES (SRS-8201198); 12 MONTHS \$59,317

OKLAHOMA

OKLAHOMA STATE UNIVERSITY

DAUFFENBACH, ROBERT. PROJECTIONS OF SUPPLY OF SCIENTISTS AND ENGINEERS TO MEET DEFENSE AND NON-DEFENSE REQUIREMENTS: 1981-1987 (SRS-8210548); 6 MONTHS \$37,793

PENNSYLVANIA

TEMPLE UNIVERSITY

TANFER, KORAY. 1982 NEW ENTRANTS SURVEYS OF RECENT SCIENCE AND ENGINEERING GRADUATES (SRS-8202228); 24 MONTHS \$278,454

UNIVERSITY OF PENNSYLVANIA-WHARTON SCHOOL OF FINANCE AND COMMERCE

MANSFIELD, EDWIN; CONSTRUCTION OF PRICE INDEXES FOR R AND D INPUTS (SRS-8201753); 30 MONTHS \$95,802

INTERNATIONAL COOPERATIVE SCIENCE PROGRAM

ARIZONA

ARIZONA STATE UNIVERSITY

NAVROTSKY, ALEXANDRA; SILICATE GLASSES AND MELTS: STRUCTURE AND THERMODYNAMICS (INT-8006965 A01); 12 MONTHS \$18,000

WORK, RICHARD N.; DIELECTRIC RELAXATION MECHANISMS IN POLYMER SOLUTIONS (INT-8026574); 12 MONTHS \$20,000

COWLEY, JOHN M.; SURFACE STUDIES BY REFLECTION AND TRANSMISSION ELECTRON MICROSCOPY (INT-811364); 24 MONTHS \$11,550

SHERIDAN, MICHAEL F.; U.S.-ITALY WORKSHOP IN EXPLOSIVE VOLCANISM, ROME, ITALY, MAY 1982 (INT-8200856); 12 MONTHS \$18,875

LIN, SHENG H.; INVESTIGATION OF QUANTUM BEAT, LEVEL-ANTI-CROSSING, PHOTOPHYSICAL PROCESSES OF SINGLE ROVIBRONIC LEVELS AND MULTI-PHOTON MOLECULAR SPECTROSCOPY (INT-8203829); 24 MONTHS \$20,300

NAVROTSKY, ALEXANDRA; U.S.-U.K. WORKSHOP ON SOLID STATE CHEMISTRY, DECEMBER 1982, OXFORD, U.K. (INT-8211107); 12 MONTHS \$17,600

UNIVERSITY OF ARIZONA

DAVIS, STANLEY N.; DATING OF GROUND WATER IN THE GREAT ARTESIAN BASIN OF AUSTRALIA (INT-811034); 12 MONTHS \$8,500

BULL, WILLIAM B.; HORIZONTAL AND VERTICAL TECTONICS OF NEW ZEALAND - A GUIDE TO SEISMIC-HAZARDS INTERPRETATIONS (EAR-811536)*; 12 MONTHS \$6,991

STULL, J. WARREN, BERRY, JAMES W. AND WEBER, CHARLES W.; BIO-CHEMICAL, NUTRITIONAL AND FUNCTIONAL PROPERTIES OF PROCESSED FOODS FROM WHOLE COWPEAS (VIGNA SINENSIS) (INT-8201223); 24 MONTHS \$19,865

ROSKOSKI, JOANN P.; SOIL ENRICHMENT AND RESOURCE POTENTIAL FROM WOODY TROPICAL LEGUMES (INT-8203438); 24 MONTHS \$19,242

HSIEH, K. C.; COLLABORATIONS WITH THE MAX PLANCK INSTITUTE FOR AERONOMY, FEDERAL REPUBLIC OF GERMANY (INT-8205325); 36 MONTHS \$13,200

CALIFORNIA

CALIFORNIA INSTITUTE OF TECHNOLOGY

GRUBBS, ROBERT H.; COOPERATIVE RESEARCH ON THE REDUCTION OF CO TO ORGANIC MATERIALS (INT-8106810); 24 MONTHS \$19,942

MCKOY, VINCENT; U.S.-JAPAN JOINT SEMINAR, ELECTRON-MOLECULE COLLISIONS AND PHOTOIONIZATION PROCESSES/OCTOBER, 1982/PASADENA, CALIFORNIA (INT-8120887); 12 MONTHS \$10,090

CALIFORNIA STATE COLLEGE, BAKERSFIELD

FLETCHER, ROBERT G.; GOVERNMENT DECENTRALIZATION: INFLUENCE ON INTER-REGIONAL SETTLEMENT PATTERNS (INT-8208603); 18 MONTHS \$9,737

HUMBOLDT STATE UNIVERSITY

WILLIS, ROBERT; SEAWATER INTRUSION IN THE YUN LIN (TAIWAN) COASTAL AQUIFER SYSTEM (INT-8115382); 24 MONTHS \$32,100

WILLIS, ROBERT; GROUNDWATER SUPPLY AND QUALITY MANAGEMENT IN THE POLPAICO BASIN, CHILE (INT-8203044); 24 MONTHS \$20,000

INDIVIDUAL AWARD

SWINEHART, JAMES H.; METAL UPTAKE AND BLOOD CHEMISTRY IN ASCIDIANS (INT-8115887); 6 MONTHS \$5,510

NAVAL POSTGRADUATE SCHOOL

CHANG, CHIH-PEI AND WILLIAMS, ROGER T.; STUDY OF ASIAN MONSOON MOTION SYSTEMS (INT-8119982); 24 MONTHS \$11,315

MOOERS, C. N.; U.S.-AUSTRALIAN JOINT SEMINAR/WORKSHOP ON 'THE WIND-DRIVEN TRANSIENT CIRCULATION ON CONTINENTAL SHELVES' MONTEREY, CA; DECEMBER 12-18, 1982 (INT-8211395); 6 MONTHS \$9,000

STANFORD UNIVERSITY

MEYERHOF, WALTER E.; COOPERATIVE PROGRAM IN HIGH-ENERGY ATOMIC PHYSICS WITH THE INSTITUTE OF THEORETICAL PHYSICS, FRANKFURT, GERMANY (INT-8106105); 36 MONTHS \$17,890

SPICER, WILLIAM E.; CORRELATIONS BETWEEN SURFACE AND CATALYTIC PROPERTIES OF NOBLE METAL ALLOYS INVOLVED IN OXIDATION REACTIONS (INT-8115384); 24 MONTHS \$18,354

KRUGER, PAUL; COOPERATIVE RESEARCH IN RADON RESERVOIR ENGINEERING (INT-8117307); 24 MONTHS \$17,770

GOLUB, GENE H.; RESEARCH WORKSHOP IN NUMERICAL METHODS, JUNE 14-18, 1982 (INT-8117980)*; 6 MONTHS \$10,400

FAIRBANK, WILLIAM M.; A SEARCH FOR GRAVITATIONAL RADIATION (INT-8200801); 24 MONTHS \$18,000

LECKIE, JAMES O.; TRANSPORT AND TRANSFORMATION PROCESSES AFFECTING TRACE COMPOUNDS IN ESTUARINE AND COASTAL SYSTEMS (INT-8201383); 24 MONTHS \$10,444

UNIVERSITY OF CALIFORNIA, BERKELEY

GOREN, SIMON L.; STUDIES OF AEROSOL PARTICLE - SURFACE INTERACTIONS: A PROJECT UNDER THE U.S.-FEDERAL REPUBLIC OF GERMANY COOPERATIVE SCIENCE PROGRAM (INT-8113063); 36 MONTHS \$18,880

DOYEN, JOHN T.; COMPARATIVE SYSTEMATIC STUDIES OF AUSTRALIAN TENEBRIONOIDEA (INT-8114360); 12 MONTHS \$7,200

FERNANDEZ-PELLO, A. CARLOS; IGNITION AND EXTINCTION OF CONDENSED FUELS (INT-8115965); 12 MONTHS \$13,189

BOWYER, C. STUART; DEVELOPMENT OF A HIGH RESOLUTION SPECTROMETER FOR EXTREME ULTRAVIOLET AND FAR ULTRAVIOLET ASTROPHYSICS (INT-8116729); 24 MONTHS \$16,600

WANG, WILLIAM S.; U.S.-CHINA STUDY OF LANGUAGE CHANGE (INT-8118400); 12 MONTHS \$19,986

PRICE, P. B., KANE, SHARAD, AND HUDSON, HUGH S.; U.S.-JAPAN JOINT SEMINAR: RECENT ADVANCES IN THE UNDERSTANDING OF SOLAR FLARES/OCTOBER, 1982/TOKYO, JAPAN (INT-8121319); 12 MONTHS \$14,136

FUERSTENAU, DOUGLAS W.; U.S.-ITALY JOINT WORKSHOP ON MINERAL PROCESSING: MILAN, ITALY, JUNE 1982 (INT-8200660); 12 MONTHS \$22,607

BOLT, BRUCE A.; TAIWAN LARGE-SCALE STRONG-MOTION ARRAY PROJECT (EARTHQUAKE ENGINEERING) (CEE-8204672)*; 12 MONTHS \$6,500

OLDHAM, WILLIAM G.; U.S.-FEDERAL REPUBLIC OF GERMANY JOINT WORKSHOP ON FUNDAMENTAL PROBLEMS IN VLSI PROCESSING: MUNICH, F.R.G., JULY 6-9, 1982 (INT-8210181); 12 MONTHS \$11,880

UNIVERSITY OF CALIFORNIA, DAVIS

FEENEY, ROBERT E.; CHEMICAL AND ENZYMATIC MODIFICATION OF PROTEINS TO INCREASE THEIR UTILITY FOR HUMAN AND ANIMAL CONSUMPTION (INT-8114373); 24 MONTHS \$10,147

HEDRICK, R. P.; DETECTION, PREVENTION AND CONTROL OF VIRAL DISEASES OF CULTURED FISHES (INT-8207426); 24 MONTHS \$15,534

UNIVERSITY OF CALIFORNIA, IRVINE

ROWLAND, F. S. AND WOLF, A. P.; U.S.-JAPAN JOINT SEMINAR: RECENT ADVANCES IN BASIC AND APPLIED RADIOCHEMISTRY IN THE LIFE SCIENCES/IRVINE, CA/ JANUARY, 1982 (INT-8100466); 12 MONTHS \$9,028

MARADUDIN, ALEXEI A. AND WALLIS, RICHARD F.; SOME NEW VIBRATIONAL PROPERTIES OF SOLID AND LIQUID SURFACES (INT-8115141); 24 MONTHS \$5,000

MARADUDIN, ALEXEI A. AND WALLIS, RICHARD F.; SOME NEW VIBRATIONAL PROPERTIES OF SOLID AND LIQUID SURFACES (INT-8115141 A01); \$7,000

UNIVERSITY OF CALIFORNIA, LOS ANGELES

CHEN, FRANCIS F.; U.S.-JAPAN JOINT SEMINAR: THEORY AND APPLICATION OF MULTIPLE IONIZED PLASMAS PRODUCED BY LASER AND PARTICLE BEAMS/OSAKA, JAPAN/MAY 1982 (INT-8112608); 12 MONTHS \$15,531

SIMPSON, LARRY; GENOTYPIC CLASSIFICATION AND CHARACTERIZATION OF PATHOGENIC TRYPANOSOMES (INT-8203629); 24 MONTHS \$28,468

GERLA, MARIO, AND PARKER, D. STOTT; ROUTING AND FLOW CONTROL INTEGRATION IN ADVANCED COMPUTER NETWORKS (INT-8205452); 24 MONTHS \$8,500

UNIVERSITY OF CALIFORNIA, SAN DIEGO-SCRIPPS INSTITUTION OF OCEANOGRAPHY

FENICAL, WILLIAM H.; NATURAL PRODUCTS CHEMISTRY OF MARINE ALGAE FROM THE SOUTH CHINA SEA (INT-8207439); 24 MONTHS \$51,584

UNIVERSITY OF CALIFORNIA, SAN DIEGO

FILLOUX, JEAN H.; MAGNETOTELLURIC SOUNDING ACROSS A SUBDUCTION ZONE (INT-8114368); 12 MONTHS \$5,737

MCILWAIN, CARL E.; ELECTRIC FIELD MEASUREMENTS IN THE EARTH'S MAGNETOSPHERE (INT-8119963); 36 MONTHS \$15,897

HUDSON, HUGH S.; COOPERATIVE STUDIES OF THE SOLAR-FLARE ENERGY BUDGET (INT-8121325); 18 MONTHS \$33,130

SCHULTZ, SHELTON; SIMULTANEOUS MAGNETIZATION AND ELECTRON SPIN RESONANCE INVESTIGATION OF SPIN GLASSES (INT-8202731); 24 MONTHS \$12,600

BAKER, BRUCE S.; CONTROL OF MITOTIC CELL DIVISION IN DROSOPHILA MELANOGASTER (INT-8203086); 24 MONTHS \$17,602

UNIVERSITY OF CALIFORNIA, SAN FRANCISCO

IWAMOTO, HARRIET S.; CENTRAL AND PERIPHERAL ACTIONS OF ANGIOTENSIN AND VASOPRESSIN IN FETAL SHEEP (INT-8200176); 6 MONTHS \$6,150

UNIVERSITY OF CALIFORNIA, SANTA BARBARA

JACCARINO, VINCENT; RESEARCH IN CONDENSED MAGNETIC SYSTEMS (INT-8112811); 24 MONTHS \$18,290

LEIPNIK, ROY B.; SELF-CONSISTENT KINETIC THEORY OF PLASMAS IN STRONG, NONUNIFORM FIELDS (INT-8114366); 6 MONTHS \$5,300

UNIVERSITY OF CALIFORNIA, SANTA CRUZ

MARCUM, JOHN A.; U.S. AUSTRALIA-NEW ZEALAND TRILATERAL SEMINAR/WORKSHOP ON 'DECOLONIZATION: AFRICAN LESSONS AND PACIFIC EXPERIENCE' CANBERRA, AUSTRALIA; AUGUST 20-23, 1982 (INT-8211394)*; 6 MONTHS \$18,887

UNIVERSITY OF SOUTHERN CALIFORNIA

SPITZER, WILLIAM G.; OPTICAL AND ELECTRICAL PROPERTIES OF ION-IMPLANTED SEMICONDUCTORS (INT-8110681); 24 MONTHS \$5,692

UNIVERSITY OF THE PACIFIC

WULFMAN, CARL F.; SYMMETRY AND INVARIANCE OF SOME DIFFERENTIAL EQUATIONS OF PHYSICS (INT-8211393); 9 MONTHS \$15,750

COLORADO

COLORADO STATE UNIVERSITY

- SHEN, HSIEH W. *THE PHYSICAL BASIS OF SURFACE WATER HYDROLOGY WITH EMPHASIS ON HILLSLOPE HYDROLOGY AND DRAINAGE NETWORK DEVELOPMENTS* (INT-8021913 A01*); 12 MONTHS \$20,148
- PATTON, CARL E. *A BRILLOUIN LIGHT SCATTERING STUDY OF MAGNETIC EXCITATIONS: U.S. FEDERAL REPUBLIC OF GERMANY INTERNATIONAL ASPECTS* (INT-8201944); 12 MONTHS \$2,566
- HANSEN, RICHARD M. *DISSERTATION IMPROVEMENT: FORAGE ALLOCATION TO COMBINATIONS OF UNGULATES IN KENYA* (INT-8203914); 24 MONTHS \$10,000
- TENGERDY, ROBERT P. AND MURPHY, VINCENT G. *FUNDAMENTALS OF SOLID STATE FERMENTATION OF AGRICULTURAL CELLULOSIC RESIDUES* (INT-8203996); 24 MONTHS \$23,857
- STERMITZ, FRANK R. *NATURAL PRODUCT CHEMISTRY RESEARCH EXCHANGE WITH THE UNIVERSITY OF COSTA RICA* (INT-8207455); 12 MONTHS \$6,611

NATIONAL CENTER FOR ATMOSPHERIC RESEARCH

- CICERONE, RALPH J. *SFC AWARD (INDIAN CURRENCY & U.S. DOLLARS) TO SUPPORT U.S. SCIENTISTS IN THE INDO-U.S. WORKSHOP ON GLOBAL OZONE PROBLEMS & POSSIBLE EFFECTS; NEW DELHI, INDIA, JAN 1983* (INT-7723757 A87*); 12 MONTHS \$8,020

UNIVERSITY OF COLORADO AT BOULDER

- KRANTZ, WILLIAM B. *COOPERATIVE RESEARCH WITH WEST GERMANY ON UNDERGROUND COAL GASIFICATION* (INT-8108409 A01); \$7,000
- SCHIFFMAN, ROBERT L. *NONMONOTONIC CONSOLIDATION OF SOIL* (INT-8115815*); 24 MONTHS \$7,000
- SMITH, STEPHEN J. *PHOTOIONIZATION FROM HIGH-LYING ATOMIC STATES* (INT-8120128); 18 MONTHS \$16,603
- WYSS, MAX, KISSLINGER, CARL, AND HABERMANN, R E. *REAL TIME SEISMIC MONITORING OF THE HELLENIC ARC BY THE GRAEFENBERG ARRAY* (INT-8121311); 12 MONTHS \$15,123

CONNECTICUT

WESLEYAN UNIVERSITY

- UPGREN, ARTHUR R. *OBJECTIVE PRISM RADIAL VELOCITIES OF STARS* (INT-8115142*); 24 MONTHS \$17,533

YALE UNIVERSITY

- SHANKAR, RAMAMURTI. *STUDY OF QUANTUM FIELD THEORY AND STATISTICAL MECHANICS IN TWO DIMENSIONS* (INT-8117361); 12 MONTHS \$3,150
- BERNSTEIN, IRA B. *PROPAGATION OF ELECTROMAGNETIC WAVES IN PLASMAS WITHIN THE FRAMEWORK OF GEOMETRIC OPTICS* (INT-8202723); 12 MONTHS \$5,000

DELAWARE

FRANKLIN INSTITUTE-BARTOL RESEARCH FOUNDATION

- GAISSER, THOMAS K. *RESEARCH ORIENTED WORKSHOP ON PHYSICS WITH LARGE EMULSION CHAMBERS AND RELATED SYSTEMS; LA PAZ, BOLIVIA, JULY 19-23, 1982* (INT-8203048*); 6 MONTHS \$15,100

UNIVERSITY OF DELAWARE

- STREICHER, MICHAEL A. *A COMPARISON OF 'NON-ELECTROLYTIC' AND ELECTROCHEMICAL CORROSION* (DMR-8013197 A01*); 8 MONTHS \$25,000
- SCHULTZ, JEROLD M. AND PREVORSEK, DUSAN C. *PROCESSING-STRUCTURE-PROPERTY RELATIONS IN THERMOPLASTIC POLYESTERS* (INT-8206731); 36 MONTHS \$44,968

DISTRICT OF COLUMBIA

ASSOCIATED UNIVERSITIES INC

- HOLLAENDER, ALEXANDER. *SFC AWARD (PAKISTANI AND U.S. CURRENCY) FOR A TRAINING COURSE & WORKSHOP ON ENVIRONMENTAL MUTAGENESIS AND CARCINOGENESIS, ISLAMABAD, PAKISTAN, OCT. - NOV. 1982* (INT-8210983*); 12 MONTHS \$5,000

BROOKINGS INSTITUTION

- LAVE, LESTER B. *USA FEDERAL REPUBLIC OF GERMANY JOINT WORKSHOP ON MANAGEMENT OF RISK* (PRA-8204319*); 10 MONTHS \$10,000

COURTESY TRAVEL SERVICE

- LYNCH, LOUISE. *TRAVEL AND ADMINISTRATIVE SERVICES IN SUPPORT OF INTERNATIONAL SCIENCE ACTIVITIES SPONSORED BY THE NATIONAL SCIENCE FOUNDATION* (08T-8018782 A06*); 12 MONTHS \$864,000

- LYNCH, LOUISE. *TRAVEL AND ADMINISTRATIVE SERVICES IN SUPPORT OF INTERNATIONAL SCIENCE ACTIVITIES SPONSORED BY THE NATIONAL SCIENCE FOUNDATION* (02T-8018782 A08*); \$100,000

- LYNCH, LOUISE. *TRAVEL AND ADMINISTRATIVE SERVICES IN SUPPORT OF INTERNATIONAL SCIENCE ACTIVITIES SPONSORED BY THE NATIONAL SCIENCE FOUNDATION* (29T-8018782 A12*); 8 MONTHS \$315,000

DEPARTMENT OF STATE

- BANYAS, JOSEPH G. *LANGUAGE SERVICES FOR INTERNATIONAL CO-OPERATIVE SCIENTIFIC RESEARCH PROGRAMS* (INT-7717618 A08*); 12 MONTHS \$60,000

- BANYAS, JOSEPH G. *SUPPORT OF THE U.S. MISSION TO UNESCO, PARIS, FRANCE* (INT-8212954); 12 MONTHS \$168,650

GEORGE WASHINGTON UNIVERSITY

- MAHMOOD, KHALID, AND TARAR, RIAZ N. *SFC AWARD (PAKISTANI CURRENCY & U.S. DOLLARS) FOR PROTOTYPE RESEARCH ON ALLU-*

- VIAL CHANNELS IN IRRIGATION CANALS AND MEDIUM SIZE RIVERS* (INT-8009474 A02*); \$14,000

- LEWIS, JOHN F. *GEOLOGICAL INVESTIGATIONS IN THE CENTRAL DOMINICAN REPUBLIC* (INT-8116073*); 24 MONTHS \$15,290

GEORGETOWN UNIVERSITY

- MARTIRE, DANIEL E. *SFC AWARD (INDIAN CURRENCY AND U.S. DOLLARS) ON THE MOLECULAR STRUCTURE AND THERMODYNAMIC PROPERTIES OF ALKANES AND POLYMERS AS A FUNCTION OF TEMPERATURE AND PRESSURE* (INT-8204295*); 36 MONTHS \$24,340

- FINN, EDWARD J. *IPA MOBILITY ASSIGNMENT* (EDWARD J. FINN) (INT-8204842); 8 MONTHS \$31,200

HOWARD UNIVERSITY

- SABNIS, GAJANAN M. *SFC AWARD (IN INDIAN CURRENCY AND U.S. DOLLARS) TO SUPPORT U.S. SCIENTISTS AT THE WORLD CONFERENCE ON REHABILITATION OF BUILDINGS AND BRIDGES, BOMBAY, INDIA; DECEMBER 1981* (INT-8111905*); 12 MONTHS \$600

- DUFFIELD, RICHARD M. AND WHEELER, JAMES W. *STUDY OF THE CHEMISTRY AND CONTROL OF SELECTED NIGERIAN INSECT PESTS* (INT-8206734); 12 MONTHS \$12,100

INDIVIDUAL AWARD

- NONE, NONE N. *U.S.-FRANCE EXCHANGE OF SCIENTISTS, 1982-83, U.S. ELEMENT* (INT-8207239); 36 MONTHS \$80,500

- NONE, NONE N. *U.S.-FRANCE EXCHANGE OF SCIENTISTS, 1982-83, FRENCH ELEMENT* (INT-8207240); 36 MONTHS \$192,000

NATIONAL ACADEMY OF SCIENCES

- MITCHELL, LAWRENCE C. *EXCHANGES WITH THE U.S.S.R. AND EASTERN EUROPE* (INT-8119747); 12 MONTHS \$900,000

- BULLOCK, MARY B. *SUPPORT OF SCIENCE AND ENGINEERING PROGRAMS WITH THE PEOPLE'S REPUBLIC OF CHINA* (INT-8201450); 12 MONTHS \$700,000

- MCCRAY, LAWRENCE E. *SUPPORT FOR THE PANEL ON SCIENTIFIC COMMUNICATION AND NATIONAL SECURITY* (INT-8211991*); 9 MONTHS \$25,000

NATIONAL ACADEMY OF SCIENCES-NATIONAL RESEARCH COUNCIL

- TOLLERTON, HARRY M. *U.S. PARTICIPATION IN THE INTERNATIONAL INSTITUTE FOR APPLIED SYSTEMS ANALYSIS* (INT-7923390 A02); 10 MONTHS \$2,260,000

NATIONAL CENTER FOR RESOURCE RECOVERY INC

- ABERT, JAMES G. *TOWARD A MODEL OF MUNICIPAL WASTE RECYCLING APPLICABLE TO A NATIONAL ECONOMY* (INT-8203081); 9 MONTHS \$19,000

SMITHSONIAN INSTITUTION

- CLELAND, CHARLES F. *STUDIES ON THE CHEMICAL CONTROL OF FLOWERING IN THE LEMNACEAE* (INT-8114574); 24 MONTHS \$6,932

- HEPPNER, JOHN B. *MOTHS OF TAIWAN AND HOST-PLANT INTERRELATIONSHIPS* (INT-8119539); 36 MONTHS \$12,344

- GANTT, ELISABETH. *U. S.-JAPAN JOINT SEMINAR: PHYCOBILIPROTEINS AND PHYCOBILISOMES-PHOTOSYNTHETIC LIGHT HARVESTERS/OCTOBER, 1982/ OKAZAKI, JAPAN* (INT-8121347); 12 MONTHS \$14,400

URBAN INSTITUTE

- GOODMAN, JOHN L. *TWO-EARNER HOUSEHOLDS, RESIDENTIAL LOCATION DECISIONS AND URBAN REVITALIZATION IN THE U.S. AND AUSTRALIA* (INT-8122007); 4 MONTHS \$4,728

FLORIDA

FLORIDA STATE UNIVERSITY

- BURNETT, WILLIAM C. *THE GEOCHEMISTRY OF SEAMOUNT PHOSPHATE DEPOSITS IN THE SOUTH PACIFIC OCEAN* (INT-8111783); 24 MONTHS \$17,894

- WALBORSKY, HARRY M. *SYNTHESES AND STUDIES OF NEW CHIRAL CHOLESTERIC LIQUID CRYSTALS HAVING AXIAL CHIRALITY* (INT-8116061); 24 MONTHS \$7,000

UNIVERSITY OF FLORIDA-ENGINEERING & INDUSTRIAL EXPERIMENT STATION

- ODUM, HOWARD T. *CHANGES IN ESTUARINE ECOSYSTEMS IN INTERACTION WITH DEVELOPMENT* (INT-8122010); 6 MONTHS \$5,600

UNIVERSITY OF MIAMI

- FITZGERALD, ROBERT J. *ORAL STREPTOCOCCI AND LACTOBACILLI OF DIFFERING CARIES-PRODUCING ACTIVITY (MICROBIOLOGY)* (INT-8211392); 6 MONTHS \$4,890

- VEZIROGLU, T NEJAT. *SFC AWARD (PAKISTANI CURRENCY AND U.S. DOLLARS) FOR U.S. PAKISTAN SYMPOSIUM/WORKSHOP ON RENEWABLE ENERGY SOURCES; MARCH 1982; LAHORE, PAKISTAN* (INT-8213235*); 12 MONTHS \$8,000

GEORGIA

GEORGIA INSTITUTE OF TECHNOLOGY MAIN CAMPUS

- GRAMS, GERALD W. *STUDIES OF CHANGES IN THE CHARACTERISTICS OF PARTICULATES AND MINOR SPECIES ACROSS THE TROPIC PAUSE* (INT-8105102 A01); 12 MONTHS \$12,698

- WINER, WARD O. *U.S. FEDERAL REPUBLIC OF GERMANY (F.R.G.) WORKSHOP ON TRIBOLOGY, BERLIN, (WESTERN SECTOR), F.R.G., SEPTEMBER 13-17, 1982* (INT-8204687); 12 MONTHS \$17,280

- TEMPLER, JOHN. *U.S.-U.K. JOINT WORKSHOP ON ARCHITECTURAL RESEARCH; JULY 1982, READING, U.K.* (INT-8205490); 18 MONTHS \$17,480

SKIDAWAY INSTITUTE OF OCEANOGRAPHY

MENZEL, DAVID W. BIOLOGICAL OCEANOGRAPHIC PROCESSES IN OR NEAR WESTERN BOUNDARY CURRENTS (GULF STREAM AND KURO SHIO) (INT-8017296 A01); \$5,000

WINDOM, HERBERT L. TRACE ELEMENT BUDGETS OF THE UPPER GULF OF THAILAND (INT-8116705); 12 MONTHS \$15,360

UNIVERSITY OF GEORGIA

KING, ROBERT B. COOPERATIVE RESEARCH WITH HUNGARY ON MOLECULAR CATALYSIS (INT-8106154); 36 MONTHS \$34,896

SCHAAD, N. W. DISSERTATION IMPROVEMENT: SEROLOGY OF XANTHOMONAS CAMPESTRIS IN THAILAND (INT-8201741); 24 MONTHS \$6,270

HAWAII

CENTER FOR CULTURAL&TECH INTERCHG EAST&WEST-EAST-WEST CENTER COMMUNICATION INSTITUTE

CARPENTER, RICHARD A. ANALYSIS OF THE PROCESS OF IMPLEMENTING REMOTE SENSING TECHNOLOGY FOR ECONOMIC DEVELOPMENT (INT-8206615); 12 MONTHS \$10,000

UNIVERSITY OF HAWAII-MANOA

GARCIA, MICHAEL O. U.S.-COSTA RICA JOINT VOLCANOLOGY SEMINAR (INT-8105068); 12 MONTHS \$11,000

SEFF, KARL. CHEMICAL AND CRYSTALLOGRAPHIC STUDIES OF SILVER IN ZEOLITE A (INT-8113065); 12 MONTHS \$4,428

IDAHO

BOISE STATE UNIVERSITY

HAUSRATH, ALAN R. COLOMBIAN APPLIED MATHEMATICS SEMINAR (INT-8208467); 12 MONTHS \$9,931

ILLINOIS

AMERICAN INSTITUTE OF INDIAN STUDIES

DIMOCK, EDWARD C. SFC AWARD (INDIAN CURRENCY AND U.S. DOLLARS) FOR RESEARCH SUPPORT OF U.S. SCIENTISTS WORKING IN INDIA (INT-8016982 A02*); 12 MONTHS \$15,000

ARGONNE NATIONAL LABORATORY

SABOUNGI, MARIE-LOU. THERMODYNAMIC PROPERTIES OF LIQUID ALLOYS (INT-8117123); 24 MONTHS \$4,500

FERMI NATIONAL ACCELERATOR LABORATORY

LEDERMAN, LEON M. PAN AMERICAN SYMPOSIUM ON PARTICLE PHYSICS AND TECHNOLOGY; COCOYOC, MEXICO; JANUARY 1982 (INT-8120902*); 6 MONTHS \$5,400

NORTHWESTERN UNIVERSITY

BANKOFF, S. GEORGE. FRAGMENTATION OF LIQUID DROPS BEHIND A PRESSURE SHOCK FRONT (MEA-8017842 A02*); 12 MONTHS \$21,600

IBERS, JAMES A. REACTIONS OF SOME TRANSITION-METAL CLUSTER SYSTEMS WITH SMALL MOLECULES (INT-8118260); 12 MONTHS \$5,000

NEMAT-NASSER, S. U. S. - JAPAN SEMINAR HYDRAULIC FRACTURING AND GEOTHERMAL ENERGY NOVEMBER 1982/TOKYO JAPAN (INT-8121176); 12 MONTHS \$14,293

UNIVERSITY OF CHICAGO

BERRY, R. STEPHEN. REACTION DYNAMICS OF CHEMI-IONIZATION (INT-8115224); 18 MONTHS \$6,800

MEYER, WILLIAM H. U.S.-FRANCE COOPERATIVE SEMINAR IN ALGEBRA: MAY 1982, PARIS, FRANCE (INT-8118883); 12 MONTHS \$18,800

DOUGLAS, JIM, AND ROBERTS, JEAN. NUMERICAL SIMULATION OF FLUID FLOW IN POROUS MEDIA (INT-8200315); 24 MONTHS \$16,000

FRITZSCHE, HELLMUT. IMPROVEMENT OF AMORPHOUS SILICON SEMICONDUCTORS (INT-8203084); 24 MONTHS \$20,020

SIGLER, PAUL B. DEVELOPMENT AND APPLICATION OF ADVANCED COMPUTER METHODS FOR THE CRYSTALLOGRAPHIC STUDY OF MACROMOLECULES (INT-8207359); 24 MONTHS \$20,000

UNIVERSITY OF ILLINOIS AT CHICAGO CIRCLE

SAXENA, SATISH C. HEAT TRANSFER IN FLUIDIZED BEDS (MEA-8022097 A01*); 12 MONTHS \$37,500

HARTNETT, JAMES P. AND SHAH, RAMESH K. SFC AWARD (INDIAN CURRENCY AND U.S. DOLLARS) FOR SUPPORT OF U.S. DELEGATION FOR A U.S.-INDO BINATIONAL WORKSHOP ON HEAT TRANSFER OF ENGINEERING (INT-8113154*); 12 MONTHS \$400

UNIVERSITY OF ILLINOIS AT URBANA

FAULKNER, LARRY R. U.S.-JAPAN JOINT SEMINAR: RECENT ADVANCES IN THE ELECTROCHEMISTRY OF ENERGY GENERATION, CONVERSION AND STORAGE/MAY, 1982/HONOLULU, HI (INT-8100479); 12 MONTHS \$10,280

BROWN, FREDERICK C. U.S.-JAPAN JOINT SEMINAR: RECOMBINATION-INDUCED DEFECT FORMATION IN CRYSTALS/URBANA, ILLINOIS/JUNE 1982 (INT-8106085); 12 MONTHS \$9,693

HOWER, JOHN. STUDY OF DIAGENETIC CLAY MINERALS IN SEDIMENTARY BASINS FROM PASSIVE CONTINENTAL MARGINS (INT-8116059); 24 MONTHS \$11,896

SALAMON, MYRON B. REENTRANT FERROMAGNETISM (INT-8116203); 24 MONTHS \$4,520

SALAMON, MYRON B. REENTRANT FERROMAGNETISM (INT-8116203 A01); \$5,100

FOUCH, DOUGLAS A. UNITED STATES-JAPAN COOPERATIVE EARTHQUAKE PROGRAM-SEISMIC TESTS OF A FULL-SCALE STEEL BUILDING AT TSUKUBA, JAPAN (EARTHQUAKE ENGINEERING) (CEE-8206200*); 12 MONTHS \$6,000

INDIANA

INDIANA UNIVERSITY, BLOOMINGTON

PARMENTER, CHARLES S. AN EXPERIMENTAL APPROACH TO VIBRATIONAL MIXING AND VIBRATIONAL REDISTRIBUTION IN ENERGIZED POLYATOMIC MOLECULES (INT-8115882); 24 MONTHS \$11,160

LANGHOFF, PETER W. COLLABORATIVE THEORETICAL STUDIES OF MOLECULAR PHOTOPROCESSES OF ASTROPHYSICAL, AERONOMICAL, AND SPECTROSCOPIC INTEREST (INT-8116534); 24 MONTHS \$16,000

NOVOTNY, MILOS V. U.S.-JAPAN JOINT SEMINAR: MICROCOLUMN SEPARATION METHODS AND THEIR ANCILLARY TECHNIQUES/NOVEMBER, 1982/HONOLULU, HAWAII (INT-8121351); 12 MONTHS \$8,549

SAN PIETRO, ANTHONY. UNITED STATES - JAPAN SEMINAR ON PHOTOCONVERSION/ PHOTOSYNTHESIS, HAWAII, SPRING, 1982 (INT-8207719); 12 MONTHS \$25,290

PURDUE UNIVERSITY

PAUL, RICHARD. A JOINT UNITED STATES-FRANCE WORKSHOP ON ADVANCED AUTOMATION AND ROBOTICS: PARIS, FRANCE, 1982 (INT-8112603); 12 MONTHS \$10,000

NEGISHI, EI-ICHI, AND KORNBUM, NATHAN. SYNTHETICALLY USEFUL METHODOLOGIES FOR C-C BOND FORMATION (INT-8112812); 24 MONTHS \$10,322

MC MILLIN, DAVID R. NOVEL LIGANDS FOR PHOTOCHEMICAL PROCESSES (INT-8116145); 12 MONTHS \$2,500

MC MILLIN, DAVID R. NOVEL LIGANDS FOR PHOTOCHEMICAL PROCESSES (INT-8116145 A01); 12 MONTHS \$3,100

NEGISHI, EI-ICHI. CONTROLLED CARBOMETALLATION REACTIONS OF ACETYLENES (INT-8116533); 24 MONTHS \$5,000

CRANE, FREDERICK L. TRANSPLASMALEMMA NADH DEHYDROGENASE AND MEMBRANE POTENTIAL IN MAMMALIAN CELLS (BIOCHEMISTRY) (INT-8121417); 4 MONTHS \$4,110

MURTHY, S. N. B. U.S.-ITALY JOINT WORKSHOP ON TURBULENT COMBUSTION AND HEAT TRANSFER, 1982, PISA, ITALY (INT-8202342); 12 MONTHS \$19,650

UNIVERSITY OF NOTRE DAME

DARDEN, SPERRY E. STUDY OF NUCLEI USING POLARIZED BEAMS (INT-8114699); 24 MONTHS \$11,178

IOWA

IOWA STATE UNIVERSITY OF SCIENCE & TECHNOLOGY

GSCHNEIDER, KARL A. RARE EARTH HYDROGEN STORAGE MATERIALS (INT-8117252); 12 MONTHS \$2,600

WEDIN, WALTER F. ENERGY: PROTEIN AVAILABILITY AND LIGNIFICATION IN SELECTED GRAMINEAE AND LEGUMINOSAE AT VARYING LATITUDES (INT-8200094); 36 MONTHS \$18,888

BEAVERS, WILLET I. RADIAL VELOCITIES OF BINARY STELLAR SYSTEMS (INT-8205814); 12 MONTHS \$16,457

KANSAS

KANSAS STATE UNIVERSITY

RICHARD, PATRICK. U.S.-JAPAN JOINT SEMINAR: PHYSICS OF HIGHLY IONIZED IONS PRODUCED IN HEAVY ION COLLISIONS/HONOLULU, HI/MARCH, 1983 (INT-8121127); 12 MONTHS \$12,703

KENTUCKY

UNIVERSITY OF KENTUCKY

LEINBACH, THOMAS R. A STUDY OF INTERMEDIATE-SIZED CITIES IN INDONESIA (INT-8203890); 12 MONTHS \$10,000

ULACK, RICHARD. STUDY OF INTERMEDIATE-SIZED CITIES IN THE PHILIPPINES (INT-8203896); 12 MONTHS \$10,000

LOUISIANA

LOUISIANA STATE UNIVERSITY MEDICAL CENTER

DESSAUER, HERBERT C. MOLECULAR STUDIES ON AUSTRALIAN ELAPID SNAKES; ESTABLISHMENT OF FROZEN TISSUE COLLECTIONS (INT-8211391); 3 MONTHS \$3,490

LOUISIANA STATE UNIVERSITY, BATON ROUGE

STANDIFER, LEON C. AND WILLIAMS, THOMAS T. ADAPTATION OF TECHNOLOGY FOR VEGETABLE PRODUCTION UNDER HIGH RAINFALL CONDITIONS IN MALAYSIA (INT-8210177); 6 MONTHS \$10,172

MAINE

UNIVERSITY OF MAINE, ORONO

BORNS, HAROLD W. SFC AWARD (INDIAN AND U.S. CURRENCY) FOR STUDY OF GLACIOMARINE SEDIMENTATION AND GONDWANA PALEOENVIRONMENTS AND STRATIGRAPHY IN EAST CENTRAL INDIA (INT-8205665*); 30 MONTHS \$24,817

MARYLAND

LEHMAN-SCAFFA ART & PHOTOGRAPHY INC

SCAFFA, ANTHONY R. GRAPHIC ARTS SERVICES (PRM-8122155 A02*); \$5,000

UNIVERSITY OF MARYLAND BALTIMORE PROF SCHOOLS

MULLINS, LORIN J. CALCIUM REGULATION IN THE AXON PERIPHERY (INT-8117161); 24 MONTHS \$12,125

UNIVERSITY OF MARYLAND, COLLEGE PARK-CENTER FOR ENVIRONMENTAL & ESTUARINE STUDIES

FISHER, THOMAS R. NUTRIENT SUPPLY AND PRIMARY PRODUCTIVITY IN AMAZON FLOODPLAIN LAKES (DEB-811398)* 12 MONTHS \$20,000

UNIVERSITY OF MARYLAND, COLLEGE PARK

WEINER, JOHN. IONIZING COLLISIONS IN THE PRESENCE OF INTENSE OPTICAL FIELDS (INT-7921251 A01)* 12 MONTHS \$20,000
COPLAN, MICHAEL A. AND CHANT, NICHOLAS S. U.S. - AUSTRALIA JOINT SEMINAR WORKSHOP ON THE 'DETERMINATION OF MOMENTUM DENSITIES IN NUCLEI ATOMS AND MOLECULES' FLINDERS PARK, AUSTRALIA, FEBRUARY 18 - 24, 1982 (INT-8115874)* 6 MONTHS \$15,771

MASSACHUSETTS

BOSTON UNIVERSITY

STANLEY, H. EUGENE. NEW EXPERIMENTAL AND THEORETICAL APPROACHES TO POLYMER MATERIALS (INT-8105106 A01)* 12 MONTHS \$11,080

MILBURN, RONALD M. INTERACTION OF NUCLEOSIDE POLYPHOSPHATES WITH DIVALENT METAL IONS (INT-8202622)* 12 MONTHS \$4,000

BRANDEIS UNIVERSITY

IRVINE, JUDITH T. U.S. AUSTRALIA JOINT SEMINAR WORKSHOP ON LANGUAGE IN CULTURAL CONTEXT: THE FRONTIER AND BEYOND, CANBERRA AUSTRALIA, JULY 4-8 1982 (INT-8101850)* 6 MONTHS \$18,710

HARVARD UNIVERSITY-HARVARD MEDICAL SCHOOL

HUANG, ALICE S. CHARACTERIZATION OF ATTENUATED STRAINS OF FOOT-AND-MOUTH DISEASE VIRUS (INT-8203085)* 4 MONTHS \$19,698

HARVARD UNIVERSITY

GRIFFITHS, PHILLIP A. CLASSIFICATION OF ALGEBRAIC VARIETIES (INT-8202719)* 24 MONTHS \$15,704

PUTNAM, ROBERT D. U.S. ITALY JOINT WORKSHOP ON INSTITUTIONAL PERFORMANCE IN ITALY (INT-8204113)* 24 MONTHS \$15,889

HARVARD UNIVERSITY-HERBARIUM

SOLBRIG, OTTO T. WORKSHOP ON THE USE OF MODERN TECHNIQUES OF MOLECULAR BIOLOGY IN PHYLOGENETIC AND EVOLUTIONARY STUDIES (INT-8108029)* 3 MONTHS \$15,300

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

SLATER, JOHN G. A DETAILED INVESTIGATION OF EXTENSIONAL MODELS FOR THE CREATION OF THE PANNONIAN BASIN (HUNGARY) (INT-7910825 A01)* 12 MONTHS \$6,355

ROHSENOW, WARREN M. AND EL-MASRI, MAHER. CRITICAL HEAT FLUX FOR GRAVITY-DRIVEN LIQUID FILMS (MEA-8017418 A02)* 12 MONTHS \$52,400

STRANG, GILBERT. U.S.-JAPAN JOINT SEMINAR: NONLINEAR PARTIAL DIFFERENTIAL EQUATIONS IN APPLIED SCIENCE, TOKYO, JAPAN, JULY, 1982 (INT-8100463)* 12 MONTHS \$13,945

HARLEMAN, R. F. COUPLED HYDROTHERMAL-BIOCHEMICAL EUTROPHICATION MODELS (INT-8112452 A01)* 12 MONTHS \$17,830

JACOBY, HENRY D. NEW FLUID FUELS TECHNOLOGIES: A COMPARATIVE ASSESSMENT ON THE U.S. AND JAPAN (INT-8114362)* 24 MONTHS \$9,915

IWASA, YUKIKAZU. SUPERCONDUCTING MAGNET TECHNOLOGY (INT-8114371)* 24 MONTHS \$15,000

SUH, NAM P. A STUDY OF DESIGN OF MANUFACTURING PROCESSES USING AN AXIOMATIC APPROACH (INT-8114863)* 12 MONTHS \$17,000

FIELD, ROBERT W. ROTATIONAL ENERGY TRANSFER AND LEVELS NEAR DISSOCIATION (INT-8115143)* 24 MONTHS \$4,700

FREY, FREDERICK A. GEOCHEMICAL AND PETROLOGIC STUDIES OF RECENT VOLCANIC ROCKS ASSOCIATED WITH PLATE CONVERGENCE IN CENTRAL SOUTH CHILE (33-4-208)* (EAR-8115850)* 12 MONTHS \$7,000

MONIZ, ERNEST. APPLICATION OF THE DOORWAY STATE APPROACH TO NUCLEON AND NUCLEUS-NUCLEUS SCATTERING (INT-8116096)* 24 MONTHS \$6,100

GARLAND, CARL W. SENIOR SCIENTIST RESEARCH VISIT TO UNIVERSITY OF PARIS (INT-8116756)* 12 MONTHS \$4,550

ELLIOTT, JOHN F. U.S. - JAPAN JOINT SEMINAR: ADVANCES IN THE SCIENCE OF IRON AND STEEL MAKING MAY, 1983, KYOTO, JAPAN (INT-8121179)* 15 MONTHS \$14,166

SHAPIRA, YAACOV. INVESTIGATIONS OF MAGNETIC PHASE TRANSITIONS (INT-8203370)* 24 MONTHS \$10,100

TUFTS UNIVERSITY

SWINNEY, DAVID A. INTERDISCIPLINARY WORKSHOP ON 'CONSTRAINTS ON MODELING REAL-TIME LANGUAGE PROCESSES' ST. MAXIM, PROVENCE, FRANCE, JUNE 21-26, 1982 (INT-8205324)* 6 MONTHS \$13,700

UNIVERSITY OF LOWELL

BRUCE, JOHN I. STUDIES OF THE FORMOSAN STRAIN OF SCHISTOSOMA JAPONICUM (INT-8112602)* 24 MONTHS \$7,154

MARTIN, JOSE G. AND FILIPPONE, WILLIAM L. PLASMA MODELING AND NUMERICAL SIMULATION OF PLASMA AND NEUTRAL PARTICLE TRANSPORT IN FUSION DEVICES (INT-8114450)* 12 MONTHS \$9,630

UNIVERSITY OF MASSACHUSETTS, AMHERST

ARBIB, MICHAEL A. U.S.-JAPAN COOPERATIVE SEMINAR: COMPETITION AND COOPERATION IN NEURAL NETS, KYOTO, JAPAN/FEBRUARY, 1982 (INT-8109477)* 12 MONTHS \$19,266

RAUSCH, MARVIN D. STUDIES ON ORGANIC DERIVATIVES OF THE EARLY TRANSITION METALS (INT-8111979)* 36 MONTHS \$19,650

EDMAN, JOHN D. THE DYNAMICS OF MURRAY VALLEY ENCEPHALITIS TRANSMISSION: HOST-VECTOR INTERACTION, WITH EMPHASIS ON

THE FEEDING HABITS OF CULEX ANNULIROSTRIS AND AEDES VIGILAX MOSQUITOES (INT-8114365)* 7 MONTHS \$5,000

IRVINE, WILLIAM M. AND HUGUENIN, G. RICHARD. RADIO ASTRONOMICAL STUDY OF INTERSTELLAR MOLECULAR CLOUDS (INT-8205661)* 36 MONTHS \$14,525

STEIN, RICHARD S. AND MISRA, ASHOK. SFC AWARD (INDIAN AND U.S. CURRENCY) FOR DEVELOPMENT AND STRUCTURE-PROPERTY CHARACTERIZATION OF POLYESTERS AND COPOLYESTERS (INT-8207859)* 36 MONTHS \$14,320

WOODS HOLE OCEANOGRAPHIC INSTITUTION

WIEBE, PETER H. AND JOYCE, TERRENCE M. U.S. AUSTRALIA-NEW ZEALAND WORKSHOP ON 'WARM-CORE RINGS FORMED BY THE EAST AUSTRALIA CURRENT AND THE GULF STREAM', WELLINGTON, NEW ZEALAND, JANUARY 18 THROUGH 23, 1982 (INT-8122008)* 3 MONTHS \$20,000

MILLIMAN, JOHN D. SFC AWARD (PAKISTANI CURRENCY AND U.S. DOLLARS) FOR A U.S.-PAKISTAN WORKSHOP ON MARINE SCIENCES, KARACHI, NOVEMBER 1982 (INT-8210182)* 12 MONTHS \$4,039

MICHIGAN

MICHIGAN STATE UNIVERSITY

CRAWLEY, GERARD M. A STUDY OF THE M1 GIANT RESONANCE BY INELASTIC PROTON SCATTERING (INT-8116064)* 12 MONTHS \$10,000

DENNIS, FRANK G. U.S.-ECUADOR SEMINAR ON GENETIC IMPROVEMENT AND PRODUCTION OF NARANJILLA (SOLANUM QUITOENSE LAM.) QUITO, ECUADOR, SUMMER 1982 (INT-8116068)* 6 MONTHS \$11,688

CRAWLEY, GERARD M. NUCLEAR SHAPES AND RESPONSE FUNCTIONS (INT-8200250)* 6 MONTHS \$10,000

SOCIETY OF MANUFACTURING ENGINEERS

STRATTON, MARK J. USA FEDERAL REPUBLIC OF GERMANY COOPERATIVE SCIENCE WORKSHOP ON MANUFACTURING SYSTEMS AND PRODUCTIVITY, TO BE HELD IN DEARBORN, MICHIGAN, MARCH 22-26, 1982 (INT-8207764)* 5 MONTHS \$11,750

UNIVERSITY OF DETROIT

FRISCH, KURT C. AND KLEMPNER, DANIEL. SYNTHESIS AND CHARACTERIZATION OF THREE-COMPONENT INTERPENETRATING POLYMER NETWORKS (IPN'S) (INT-8112099)* 24 MONTHS \$14,990

UNIVERSITY OF MICHIGAN-ANN ARBOR

NAGY, ANDREW F. SOLAR WIND-PLANETARY IONOSPHERE INTERACTIONS (INT-8026015 A01)* 12 MONTHS \$14,995

DOMINO, EDWARD F. JOINT U.S.-FRENCH SEMINAR ON CHEMISTRY, PHARMACOLOGY, TOXICOLOGY, THERAPY AND DRUG ABUSE ASPECTS OF ARYL-CYCLOHEXYLAMINES (INT-8115755)* 12 MONTHS \$20,000

WOLPOFF, MILFORD H. CHINESE PLEISTOCENE HUMAN EVOLUTION (INT-8117276)* 12 MONTHS \$26,887

WAGNER, WARREN H. GEOGRAPHY AND BIOSYSTEMATICS OF CHINESE AND NORTH AMERICAN FERNS (INT-8214232)* 12 MONTHS \$9,362

MINNESOTA

MAYO FOUNDATION

TAYLOR, STUART R. EXCITATION CONTRACTION COUPLING IN MUSCLE (INT-8116076)* 24 MONTHS \$12,000

UNIVERSITY OF MINNESOTA-INSTITUTE OF TECHNOLOGY

PENDER, EMIL. STUDIES OF THE ANODE REGION OF HIGH INTENSITY ARCS FOR APPLICATIONS IN PLASMA METALLURGY (INT-8200092)* 36 MONTHS \$16,960

UNIVERSITY OF MINNESOTA

BRASTED, ROBERT C. U.S.-JAPAN COOPERATIVE SCIENCE SEMINAR ON FUNDAMENTALS OF CHEMISTRY FOR THE NON-MAJOR IN TERTIARY EDUCATION/ MINNEAPOLIS, MN/ OCTOBER, 1981 (INT-8100462)* 12 MONTHS \$7,200

KUMAR, K. S. P. COMPUTER CONTROL OF INDUSTRIAL PROCESSES (INT-8120366)* 36 MONTHS \$35,760

MISSISSIPPI

MISSISSIPPI STATE UNIVERSITY

DE LA CRUZ, ARMANDO A. AND MILES, D. HOWARD. BIOASSAY AND ISOLATION OF TOXICANTS FROM MANGROVE PLANTS (INT-8207322)* 24 MONTHS \$40,657

MISSOURI

ST LOUIS UNIVERSITY-SCHOOL OF MEDICINE

HERTELENDY, FRANK. ROLE OF PROSTAGLANDINS IN UTERINE FUNCTION: A MOLECULAR APPROACH (INT-8201555)* 36 MONTHS \$42,064

UNIVERSITY OF MISSOURI, COLUMBIA

HOFT, RICHARD G. U.S.-JAPAN COOPERATIVE SCIENCE SEMINAR ON ANALYSIS AND DESIGN IN POWER ELECTRONICS/OSAKA, JAPAN/NOVEMBER, 1981 (INT-8100480)* 12 MONTHS \$15,256

LAMBETH, VICTOR N. USE OF TOMATO GERMPLASM AND GENETIC METHODS TO IMPROVE FOOD PRODUCTION IN THAILAND (INT-8200036)* 18 MONTHS \$10,000

UNIVERSITY OF MISSOURI, ROLLA

LONG, GARY J. HIGH PRESSURE MOSSBAUER EFFECT STUDY OF MIXED LIGAND COMPLEXES (INT-8202403)* 36 MONTHS \$15,225

WASHINGTON UNIVERSITY-SCHOOL OF MEDICINE

SCHLESSINGER, DAVID; U.S. JAPAN COOPERATIVE SEMINAR: TERMINATION, ANTITERMINATION AND PROCESSING OF MESSENGER RNA/SHIZUOKA, JAPAN, MARCH 1982 (INT-8100469); 12 MONTHS \$15,775

WASHINGTON UNIVERSITY

CHILTON, MARY-DELL; A MINI-TI PLASMID VECTOR FOR INTRODUCING NOVEL GENES INTO PLANT PROTOPLASTS (INT-8108378); 36 MONTHS \$32,542

ZABORSZKY, JOHN, AND TARN, TZYH-JONG; STRUCTURE AND REGULATOR THEORY OF BILINEAR AND NONLINEAR SYSTEMS (INT-8201554); 24 MONTHS \$8,150

NEBRASKA

UNIVERSITY OF NEBRASKA AT LINCOLN

LEUNG, KAM CHING; CLOSE BINARY STAR SYSTEMS (INT-8120404); 22 MONTHS \$44,572

WAYNE, WILLIAM J.; HOLOCENE CLIMATIC CHANGES AND PERMAFROST DEGRADATION, CENTRAL ANDES, ARGENTINA (INT-8202349); 12 MONTHS \$18,000

NEW HAMPSHIRE

UNIVERSITY OF NEW HAMPSHIRE, DURHAM

LOCKWOOD, JOHN A. AND WEBBER, WILLIAM R.; RELATIVISTIC SOLAR FLARE PARTICLE PROPAGATION AND COSMIC RAY MODULATION STUDIES (INT-8118555); 24 MONTHS \$15,000

MAYEWSKI, PAUL A. AND LYONS, W. BERRY; SFC AWARD (INDIAN CURRENCY AND U.S. DOLLARS) FOR STUDY OF PALEOCLIMATIC RECONSTRUCTION ALONG THE MONSOON-ARID TRANSITION ZONE - INDIAN HIMALAYAS (INT-8203891); 12 MONTHS \$9,230

NEW JERSEY

PRINCETON UNIVERSITY

PRUD'HOMME, ROBERT K. AND SMALL, HAMISH; INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH ACTIVITY: FUNDAMENTALS AND APPLICATIONS OF HYDRODYNAMIC CHROMATOGRAPHIC SEPARATIONS (CPE-8003320 A01*); 12 MONTHS \$3,000

KOBERSTEIN, JEFFREY T.; THEORETICAL AND EXPERIMENTAL INVESTIGATIONS OF MICROPHASE SEPARATION IN BLOCK COPOLYMERS AND THEIR BLENDS WITH HOMOPOLYMERS (INT-8116066); 12 MONTHS \$8,000

WIGHTMAN, ARTHUR S.; THEORETICAL PHYSICS (PHY-8117463 A01*); \$1,968

RUTGERS UNIVERSITY-COOK COLLEGE

CHEN, TSEH A.; BIOLOGY OF SPIROPLASMA - A NEW PLANT PATHOGEN (INT-8119261); 36 MONTHS \$44,982

RUTGERS UNIVERSITY

VINCENT, PAUL; COOPERATIVE STUDY OF ELECTROMAGNETIC DECAY PROCESSES IN HIGH ENERGY ATOMIC COLLISIONS WITH THE INSTITUTE OF NUCLEAR PHYSICS, FRANKFURT, GERMANY (INT-8201905); 36 MONTHS \$18,435

NEW MEXICO

NEW MEXICO INSTITUTE OF MINING AND TECHNOLOGY

NORMAN, DAVID I.; GENESIS OF GOLD-QUARTZ VEIN DEPOSITS IN EASTERN CAMEROON (INT-8201377); 18 MONTHS \$9,523

UNIVERSITY OF NEW MEXICO

FINLEY, JAMES D.; JOINT STUDIES OF THE COMPLEX EINSTEIN EQUATIONS (INT-8115221); 24 MONTHS \$6,692

NEW YORK

ASIA SOCIETY

TANEN, TED M.; SFC AWARD (IN INDIAN CURRENCY AND U.S. DOLLARS) FOR THE EXCHANGE AND COLLABORATION OF INDIAN AND AMERICAN RESEARCH SCHOLARS IN THE NATURAL AND SOCIAL SCIENCES (INT-8201902*); 24 MONTHS \$20,000

BOYCE THOMPSON INST FOR PLANT RESEARCH INC

GRANADOS, ROBERT R.; WORKSHOP ON MICROBIAL CONTROL OF INSECTS, MONTERREY, MEXICO, MARCH, 1982 (INT-8116092); 12 MONTHS \$7,450

BROOKHAVEN NATIONAL LABORATORY

THIEBERGER, PETER; STUDY OF SEMI-AND DOUBLY-DECOUPLED BANDS IN TRANSITIONAL ODD-ODD NUCLEI (INT-8119006); 24 MONTHS \$10,000

HERSHCOVITCH, ADY; RIPPLE INDUCED DIFFUSION IN A TOKAMAK (INT-8202734); 24 MONTHS \$16,903

BROOKLYN COLLEGE

BHATTACHARJ, SOMDEV; SFC AWARD (INDIAN AND U.S. CURRENCY) FOR A BINATIONAL WORKSHOP ON THE EVOLUTION AND ECONOMIC POTENTIAL OF THE CUDDAPAH BASIN, SOUTH INDIA (INT-8116808*); 12 MONTHS \$5,660

CITY COLLEGE

ROSS, GEORGE G.; MATHEMATICAL MODELING OF MARINE ECOSYSTEMS (INT-8116687); 12 MONTHS \$3,500

CUMMINS, HERMAN Z.; U.S. JAPAN JOINT SEMINAR: LIGHT SCATTERING STUDIES OF STRUCTURAL PHASE TRANSITIONS/JUNE, 1982/SENDAI, JAPAN (INT-8121345); 15 MONTHS \$14,922

MANASSAH, JAMAL; A FEASIBILITY STUDY FOR A PROGRAM IN SCIENCE AND TECHNOLOGY PROJECT MANAGEMENT (INT-8209074); 12 MONTHS \$24,000

COLUMBIA UNIVERSITY

DALZIEL, IAN W.; COOPERATIVE GEOLOGIC STUDIES IN THE SOUTHERN ANDES (INT-7920213 A01*); 24 MONTHS \$20,000

HAPPEL, JOHN, AND CHEH, HUK Y.; MODEL IDENTIFICATION AND EXPERIMENT DESIGN IN HETEROGENEOUS CATALYSIS (INT-8115613); 36 MONTHS \$5,000

HAPPEL, JOHN, AND CHEH, HUK Y.; MODEL IDENTIFICATION AND EXPERIMENT DESIGN IN HETEROGENEOUS CATALYSIS (INT-8115613 A01); \$4,400

COLUMBIA UNIVERSITY-LAMONT-DOHERTY GEOLOGICAL OBSERVATORY

SIMPSON, H. JAMES, AND DECK, BRUCE L.; GEOCHEMICAL AND SEDIMENTOLOGICAL STUDIES ON SELECTED AREAS OF ITALIAN SEAS AIMED AT UNDERSTANDING CONTAMINATION PROCESSES (INT-8202738); 36 MONTHS \$24,300

LABRECQUE, JOHN L.; GEOPHYSICAL STUDY OF THE TYRRHENIAN BASIN (INT-8203372); 24 MONTHS \$12,012

CORNELL UNIVERSITY

KOHLSTEDT, DAVID L.; KINETIC DEMIXING OF NON-HYDROSTATICALLY STRESSED MULTICOMPONENT OXIDES AND SILICATES (DMR-8100131*); 12 MONTHS \$5,250

BRUTSAERT, WILFRIED H.; REGIONAL EVAPORATION FROM HILLY AND COMPLEX TERRAIN (ATM-8115713*); 12 MONTHS \$12,900

SASS, STEPHEN L.; JOINT U.S.-FRANCE SEMINAR ON THE STRUCTURE AND PROPERTIES OF GRAIN BOUNDARIES: SEPTEMBER 1982, CAEN, FRANCE (INT-8120071); 12 MONTHS \$12,000

JENKINS, JAMES T.; U.S.-JAPAN JOINT SEMINAR: NEW MODELS AND CONSTITUTIVE RELATIONS IN THE MECHANICS OF GRANULAR MATERIALS/AUGUST, 1982/ITHACA, NEW YORK (INT-8121058*); 12 MONTHS \$5,982

CORNELL UNIVERSITY-CORNELL UNIVERSITY MEDICAL CENTER

DICKERMAN, ROBERT W.; DYNAMICS OF VENEZUELAN ENCEPHALITIS VIRUS IN COLOMBIA, A CENTER OF PERSISTENT VIRAL ACTIVITY (INT-8203076); 24 MONTHS \$31,509

CORNELL UNIVERSITY-CORNELL UNIVERSITY - ENDOWED

HOFFMANN, ROALD, AND IBERS, JAMES A.; U.S.-CHINA STUDY OF THE COORDINATION OF SMALL MOLECULES TO TRANSITION METAL CENTERS (INT-8117267); 24 MONTHS \$46,840

CORNELL UNIVERSITY-CORNELL UNIVERSITY - STATE

MORSE, ROGER A.; BIOLOGY AND CONTROL OF VARROA JACOBSONI AN IMPORTANT PARASITIC MITE OF HONEY BEES (INT-8201200); 12 MONTHS \$17,703

DOWNSTATE MEDICAL CENTER AT BROOKLYN

RODRIGUEZ-BOULA, ENRIQUE; PHYSIOLOGICAL ASPECTS OF VIRAL INFECTION IN EPITHELIAL CELLS (INT-8116706); 24 MONTHS \$5,139

MOUNT SINAI SCH OF MED CITY UNIV OF NEW YORK

DESNICK, ROBERT J.; ENZYME REPLACEMENT AND TRANSPLANTATION STRATEGIES FOR HEREDITARY METABOLIC DISEASES (INT-8114373); 24 MONTHS \$10,810

GURPIDE, ERLIO; QUANTITATIVE STUDY OF METABOLISM OF ANDROGENS IN EPIDIDYMAL TISSUE IN CULTURE (INT-8116144); 24 MONTHS \$2,100

NEW YORK BOTANICAL GARDEN

KOYAMA, TETSUO M.; U.S. - TAIWAN SYMPOSIUM ON THE IMPROVED EXPLOITATION AND DEVELOPMENT OF PLANT RESOURCES (INT-8114598); 9 MONTHS \$17,630

NEW YORK UNIVERSITY-MEDICAL CENTER

SABATINI, DAVID D.; U.S.-JAPAN COOPERATIVE SEMINAR ON BIOGENESIS OF MEMBRANES AND CELL ORGANELLES/KYOTO, JAPAN/DECEMBER, 1981 (INT-8100482); 12 MONTHS \$15,296

NICHOLSON, CHARLES; COMPARATIVE STUDY OF SPREADING DEPRESSION IN THE RETINA AND THE CEREBELLUM (INT-8202685); 24 MONTHS \$10,100

NEW YORK UNIVERSITY

STROKE, H. HENRY; REACTIVE AND COLLISIONAL PROCESSES IN LASER FIELDS (INT-7921530 A01); 12 MONTHS \$19,026

BRANDT, WERNER; U.S.-JAPAN COOPERATIVE SEMINAR: CHARGE STATES AND DYNAMIC SCREENING OF SWIFT IONS IN SOLIDS/JANUARY 1982/HONOLULU, HAWAII (INT-8100476); 12 MONTHS \$11,868

STOTZKY, GUENTHER; EFFECTS OF CLAY MINERALS ON MICROBIAL DYNAMICS (INT-8116648); 12 MONTHS \$3,300

NEW YORK ZOOLOGICAL SOCIETY

LEWIS, DALE M.; A DATA MANAGEMENT SYSTEM FOR MONITORING POPULATIONS OF ENDANGERED MAMMALS (INT-8206662); 18 MONTHS \$6,300

POLYTECHNIC INSTITUTE OF NEW YORK

HAN, CHANG D.; STRUCTURAL FOAM PROCESSING (INT-8209482); 24 MONTHS \$11,754

CASSEDY, EDWARD S.; COMPUTER MODELING FOR PLANNING ELECTRICAL POWER SYSTEMS IN DEVELOPING COUNTRIES (INT-8208747); 12 MONTHS \$7,907

QUEENS COLLEGE

CHABORA, PETER C; *EVOLUTIONARY ECOLOGY OF THE PARASITOID-DROSOPHILID COMPLEX OF THE FRENCH WEST INDIES AND PUERTO RICO* (INT-8118553); 24 MONTHS \$10,000

DI PAOLA, ROBERT A; *ALGEBRAIC STUDY OF INCOMPLETENESS IN FORMAL THEORIES: THE DIAGONALIZABLE ALGEBRAS WITH QUANTIFICATION* (INT-8201882); 24 MONTHS \$8,406

RENSSELAER POLYTECHNIC INSTITUTE

MIN, KONGKI; *STUDY OF SPIN-FLIP GIANT RESONANCES USING PHOTOPION REACTIONS* (INT-7819340 A02); 6 MONTHS \$2,850

ISAACSON, DAVID; *NUMERICAL METHODS FOR STUDYING SCHRODINGER ENERGY OPERATORS AND CRITICAL BEHAVIOR* (INT-8115814); 12 MONTHS \$12,000

LING, FREDERICK F; *WEAR AND ITS REDUCTION IN TRIBOLOGICAL SYSTEMS* (INT-8116757); 36 MONTHS \$37,334

BLOCK, ROBERT C; *U.S.-JAPAN JOINT SEMINAR: THE THORIUM FUEL CYCLE/OCTOBER 1982, NARA, JAPAN* (INT-8121178); 12 MONTHS \$15,160

STATE UNIVERSITY AT ALBANY

MARBLE, DUANE F, AND PEUQUET, DONNA J; *U.S. - AUSTRALIA JOINT SEMINAR/WORKSHOP ON THE 'DESIGN AND IMPLEMENTATION OF COMPUTER-BASED GEOGRAPHIC INFORMATION SYSTEMS'*; HONOLULU, HI, JUNE 29 - JULY 2, 1982 (INT-8115883); 6 MONTHS \$9,170

STATE UNIVERSITY AT BUFFALO

BENENSON, DAVID M; *U.S.-AUSTRALIA JOINT SEMINAR/WORKSHOP ON 'ELECTRICAL DISCHARGE PHENOMENA'*; SYDNEY, AUSTRALIA; FEBRUARY 1 THROUGH 5, 1982 (INT-8113254); 6 MONTHS \$17,863

WELLER, SOL W; *THE FUNCTION AND FATE OF CATALYSTS DURING COAL LIQUEFACTION* (INT-8115888); 3 MONTHS \$5,370

STATE UNIVERSITY AT STONY BROOK

WEIDNER, DONALD J; *ELASTIC AND CRYSTALLOGRAPHIC PROPERTIES OF MINERALS SYNTHESIZED AT HIGH PRESSURE AND TEMPERATURE* (INT-8114774); 24 MONTHS \$18,250

CESS, ROBERT J; *STUDY OF RADIATIVE ENERGY TRANSFER IN GASES (MECHANICAL ENGINEERING)* (MEA-8119770*); 12 MONTHS \$38,500

LAWSON, H. BLAINE; *U.S.-BRAZILIAN RESEARCH PROJECT IN DIFFERENTIAL EQUATIONS AND GEOMETRY* (INT-8203468); 24 MONTHS \$19,456

HANSON, GILBERT N; *SFC AWARD (INDIAN CURRENCY AND U.S. DOLLARS) FOR RESEARCH ON PETROGENESIS AND ORE GENESIS OF THE ARCHEAN KOLAR SCHIST BELT, KARNATAKA, INDIA* (INT-8205325*); 36 MONTHS \$20,000

SYRACUSE UNIVERSITY

STARMER, WILLIAM T; *U.S.-AUSTRALIA JOINT SEMINAR/WORKSHOP ON 'ECOLOGICAL GENETICS: THE CACTUS-YEAST-DROSOPHILA MODEL SYSTEM'*; ORACLE, AZ, JANUARY 5-10, 1982 (INT-8100213); 6 MONTHS \$10,900

REYNOLDS, JOHN C; *U.S.-FRANCE JOINT SEMINAR ON THE APPLICATION OF ALGEBRA TO LANGUAGE DEFINITION AND COMPILATION*; FONTAINEBLEAU, FRANCE, JUNE 9-14, 1982 (INT-8120256); 12 MONTHS \$20,250

UNIVERSITY OF ROCHESTER-SCHOOL OF MEDICINE AND DENTISTRY

SENIOR, ALAN E; *BACTERIAL PROTON-ADENOSINE TRIPHOSPHATASE (H-ATPASE)* (INT-8115885); 6 MONTHS \$9,050

UNIVERSITY OF ROCHESTER

OLSEN, STEPHEN L; *A STUDY OF POSITRON/ELECTRON ANNIHILATIONS AT THE TRISTAN STORAGE RING* (INT-8121106); 18 MONTHS \$29,395

FULBRIGHT, HARRY W; *NUCLEAR RESEARCH COLLABORATION BETWEEN PANJAB AND ROCHESTER UNIVERSITY* (INT-8205335); 12 MONTHS \$10,800

XEROX CORPORATION

MORT, JOSEPH; *U.S.-JAPAN JOINT SEMINAR: TECHNOLOGICAL APPLICATIONS OF TETRAHEDRALLY-BONDED AMORPHOUS SOLIDS/JULY, 1982/PALO ALTO, CALIFORNIA* (INT-8121352); 9 MONTHS \$10,250

NORTH CAROLINA

DUKE UNIVERSITY

LIVINGSTONE, DANIEL A; *AFRICAN PALEOLIMNOLOGY* (INT-8115616); 12 MONTHS \$16,000

EAST CAROLINA UNIVERSITY

LIEBERMAN, EDWARD M; *NEURON-GLIA INTERACTIONS AT NERVE FIBERS AND THEIR SYNAPSES* (INT-8117183); 24 MONTHS \$16,400

NORTH CAROLINA STATE UNIVERSITY AT RALEIGH

SIEWERT, CHARLES E; *BENCHMARK CALCULATIONS IN NEUTRON-TRANSPORT THEORY AND RAREFIED-GAS DYNAMICS* (INT-8200998); 36 MONTHS \$9,103

SIEWERT, CHARLES E; *COMPUTATIONAL ASPECTS OF THE THEORY OF MULTIPLE LIGHT SCATTERING* (INT-8201706); 36 MONTHS \$10,903

UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL

BAER, TOMAS; *PRE-DISSOCIATION AND PRE-IONIZATION STUDIES IN SMALL MOLECULES* (INT-8116412); 12 MONTHS \$5,500

TULCHIN, JOSEPH; *SEMINAR ON LATIN AMERICAN FOREIGN POLICIES IN COMPARATIVE PERSPECTIVE, SANTIAGO, CHILE, SEPTEMBER 1982* (INT-8118188); 12 MONTHS \$15,600

OHIO

CASE WESTERN RESERVE UNIVERSITY

HEUER, ARTHUR H, AND MITCHELL, TERENCE E; *THE KINETICS OF DISLOCATION DIPOLE ANNIHILATION IN PURE AND DOPED SAPPHIRE* (INT-8115673); 12 MONTHS \$16,000

OHIO STATE UNIVERSITY

WHILLANS, IAN M; *DEDUCING GLACIAL AND CLIMATE CHANGE FROM THE BYRD STATION, ANTARCTICA, ICE CORE* (INT-8116531); 24 MONTHS \$5,950

HARDER, JOHN D; *OVARIAN CONTROL OF PARTURITION AND POST-PARTUM ESTRUS IN THE TAMMAR WALLABY* (INT-8200336); 12 MONTHS \$9,582

DONOGHUE, TIMOTHY R; *COOPERATIVE RESEARCH PROGRAM IN NUCLEAR ASTROPHYSICS AND TIME REVERSAL INVARIANCE IN PROTON ELASTIC SCATTERING* (INT-8203057); 24 MONTHS \$19,104

ADLER, LASZLO; *UNITED STATES 'FEDERAL REPUBLIC OF GERMANY WORKSHOP ON RESEARCH AND DEVELOPMENT' TO NEW PROCEDURES IN NONDESTRUCTIVE TESTING-SAARBRUECKEN, F.R.G., 8/30 - 9/03/82* (INT-8203630); 6 MONTHS \$19,500

HITZHUEN, FRED J; *DISSERTATION IMPROVEMENT: THE ECONOMICS OF REFORESTATION IN DEVELOPING COUNTRIES* (INT-8207438); 12 MONTHS \$10,000

UNIVERSITY OF AKRON MAIN CAMPUS

KENNEDY, JOSEPH P; *NEW MATERIALS AND PROCESSES BY CARBO-CATIONIC POLYMERIZATION* (DMR-8120964 A01*); \$10,000

UNIVERSITY OF CINCINNATI

DE JONG, KEES A, AND FARAH, ABUL; *SFC AWARD (PAKISTANI CURRENCY AND U.S. DOLLARS) FOR STUDY OF GEODYNAMICS OF PAKISTAN - SUPPLEMENT* (INT-8013158 A01*); 12 MONTHS \$7,700

WILSON, R MARSHAL; *SYNTHETIC APPLICATIONS OF THE LASER TO PEROXIDE CHEMISTRY* (INT-8203039); 24 MONTHS \$13,040

OKLAHOMA

OKLAHOMA STATE UNIVERSITY

ABDEL HADY, M; *USE OF MODERN REMOTE SENSING TECHNIQUES IN MONITORING DESERTIFICATION AND NATURAL RESOURCES* (INT-8005188 A01); \$14,296

WALLER, GEORGE R; *ALTERNATIVE ANTIOXIDATIVE COMPOUNDS IN MAILLARD REACTION* (INT-8018220 A01); 12 MONTHS \$20,170

POWELL, RICHARD C, SIBLEY, WILLIAM A, AND MARTIN, JOEL J; *ENERGY TRANSFER IN EUROPIUM-DOPED, ALKALI-HALIDE SINGLE CRYSTALS* (INT-8120975); 12 MONTHS \$5,250

UNIVERSITY OF OKLAHOMA HEALTH SCIENCES CENTER

FERRETTI, JOSEPH J; *MECHANISMS OF ANTIBIOTIC RESISTANCE IN STREPTOCOCCI* (INT-8115610); 12 MONTHS \$8,000

UNIVERSITY OF OKLAHOMA NORMAN CAMPUS

LOCKE, CARL E; *COOPERATIVE RESEARCH IN CORROSION* (INT-8200102); 24 MONTHS \$10,587

OREGON

OREGON STATE UNIVERSITY

FRYER, J L, AND KOHOVEC, JOHN S; *INFECTIOUS DISEASES AMONG POPULATIONS OF SALMONID FISHES IN KOREA* (INT-8114862); 24 MONTHS \$14,342

LAURENCE, ROBERT D, AND YEATS, ROBERT S; *SFC AWARD (PAKISTANI CURRENCY AND U.S. DOLLARS) FOR STUDY OF THE TECTONICS OF NORTHERN PAKISTAN (GEODYNAMICS OF PAKISTAN PROJECT)* (INT-8118403*); 36 MONTHS \$10,000

MARTIN, MICHAEL V; *AN ECONOMIC ANALYSIS OF THE IMPACTS OF POLICY AND POLICY RELATED EVENTS ON U.S. - REPUBLIC OF KOREA AGRICULTURAL TRADE* (INT-8121151); 18 MONTHS \$7,690

NESHYBA, STEPHEN J; *DESCRIPTIVE OCEANOGRAPHY OF THE SURFACE (0-200 METERS) THERMAL FIELD OF THE COSTA RICA SECTOR OF THE EASTERN PACIFIC* (INT-8203959); 24 MONTHS \$24,689

WHITE, JAMES D; *THE CHEMISTRY OF ALKALOIDS AND TERPENES FROM CHINESE MEDICINAL PLANTS* (INT-8306412); 12 MONTHS \$19,240

PENNSYLVANIA

ACADEMY OF NATURAL SCIENCES OF PHILADELPHIA

DAVIS, GEORGE M; *FAUNAL SURVEY OF HYDROBIOID SNAILS OF SOUTHERN SOUTH AMERICA* (DEB-8205827*); 36 MONTHS \$20,000

CARNEGIE-MELLON UNIVERSITY-CARNEGIE INSTITUTE OF TECHNOLOGY

JAIN, RAKESH K; *DYNAMICS OF MEMBRANE FORMATION* (INT-8204190); 36 MONTHS \$46,875

CARNEGIE-MELLON UNIVERSITY

WILLIAMS, WILLIAM O, AND OWEN, DAVID R; *STUDIES OF RATE-SENSITIVE MATERIALS. APPLIED MATHEMATICS* (INT-8200038); 36 MONTHS \$19,924

DREXEL UNIVERSITY

TSOU, FU KANG; *EXPERIMENTAL STUDIES OF INJECTION STREAM TURBULENCE IN FILM COOLING* (MEA-8117382*); 12 MONTHS \$20,000

FRANKLIN INSTITUTE

GAISSER, THOMAS K; *COSMIC RAY CASCADES: IMPLICATIONS FOR PARTICLE PHYSICS AND ASTROPHYSICS ABOVE 10-15 EV* (INT-8109567); 36 MONTHS \$24,970

POMERANTZ, MARTIN A. AND DUGGAL, SHAKTI P; COSMIC RAY MODULATION OVER THE ENERGY RANGE 1 - 200 GEV (INT-8114863); 24 MONTHS \$5,000

PENNSYLVANIA STATE UNIVERSITY

GIVEN, PETER H. AND WHITEHURST, D DUAYNE; U.S.-AUSTRALIA JOINT SEMINAR/WORKSHOP ON 'THE SCIENCE OF COAL LIQUEFACTION'; MELBOURNE, AUSTRALIA; MAY 24 THROUGH 29, 1982 (INT-8114361); 6 MONTHS \$14,266

FONASH, STEPHEN J; ROLE OF SEMICONDUCTOR ETCHING AND METAL DEPOSITION APPROACHES IN SCHOTTKY BARRIER DIODE FORMATION (INT-8116093); 24 MONTHS \$16,000

HENISCH, HEINZ K; THEORY OF METAL-SEMICONDUCTOR-METAL SYSTEMS (INT-8205502); 24 MONTHS \$18,100

SHAMMA, MAURICE; SFC AWARD (PAKISTANI CURRENCY AND U.S. DOLLARS) FOR STUDIES ON NEW ISOQUINOLINE ALKALOIDS (INT-8209537*); 36 MONTHS \$16,450

TEMPLE UNIVERSITY

LOSCIUTO, LEONARD A; A SURVEY OF INTERNATIONAL PROGRAMS (INT-8021596 A03); 5 MONTHS \$81,471

HAVAS, PETER, AND COHEN, JEFFREY M; STUDIES IN GENERAL RELATIVITY AND ASTROPHYSICS (INT-8122016); 24 MONTHS \$18,160

UNIVERSITY OF PENNSYLVANIA

POLLACK, SOLOMON R; STRESS GENERATED POTENTIALS IN BONE (INT-8108481); 24 MONTHS \$20,000

ZEMEL, JAY N; STUDY OF CHEMICALLY SENSITIVE ELECTRONIC DEVICES (INT-8114775); 24 MONTHS \$12,726

JOSHI, ARAVIND K; USA-FRANCE JOINT SEMINAR ON COMPREHENSION OF NATURAL LANGUAGE; JUNE 1982, PARIS, FRANCE (INT-8120072); 12 MONTHS \$12,000

PUERTO RICO

UNIVERSITY OF PUERTO RICO, RIO PIEDRAS

STOLBERG, HAROLD J; IPA MOBILITY ASSIGNMENT (HAROLD J. STOLBERG-ACOSTA) (INT-8212352); 15 MONTHS \$50,000

RHODE ISLAND

BROWN UNIVERSITY

BAUM, PAUL F; K THEORY OF FOLIATIONS AND LIE GROUP: APPLICATIONS TO INDEX THEORY AND REPRESENTATION THEORY (INT-8116142); 36 MONTHS \$14,000

STILES, PHILLIP J, AND YING, SEE-CHEN; THERMAL AND ELECTRONIC PROPERTIES OF QUASI-TWO-DIMENSIONAL SYSTEMS (INT-8119267); 24 MONTHS \$19,918

CANE, DAVID E; U.S.-JAPAN JOINT SEMINAR: BIOSYNTHESIS OF NATURAL PRODUCTS/ HONOLULU, HI/SEPTEMBER, 1982 (INT-8121637); 6 MONTHS \$12,856

KANG, KYUNGSIK; A COOPERATIVE RESEARCH PROGRAM IN THEORETICAL HIGH-ENERGY PHYSICS (INT-8203913); 24 MONTHS \$11,386

HALE, JACK K; NONLINEAR DYNAMICAL SYSTEMS (MATHEMATICAL SCIENCES) (MCS-8205355 A01*); \$10,485

UNIVERSITY OF RHODE ISLAND

BROWN, PHYLLIS R; COMPARATIVE STUDIES OF NUCLEOTIDE METABOLISM IN MARSUPIAL AND PLACENTAL MAMMALS (INT-7826668 A03); 12 MONTHS \$4,605

SOUTH CAROLINA

CLEMSON UNIVERSITY

ABRAMOVITCH, PUDOLPH A; REARRANGEMENTS OF N-AMINOPYRIDINIUM SALTS (INT-8111977); 24 MONTHS \$13,000

MORR, CHARLES V, AND MANGINO, MICHAEL E; WHEY PROTEIN FUNCTIONALITY (INT-8211388); 24 MONTHS \$4,300

UNIVERSITY OF SOUTH CAROLINA AT COLUMBIA

KANES, WILLIAM H; WORKSHOP ON RESULTS OF RELATIONSHIPS OF TUNISIA TO THE NORTHWEST AFRICAN STRUCTURAL UNIT AND IMPLICATIONS TO CONTINENTAL GEODYNAMICS, SPRING 1982, TUNISIA (INT-7310593 A10); 6 MONTHS \$19,802

TENNESSEE

UNIVERSITY OF TENNESSEE AT KNOXVILLE

WHITE, JAMES L, BOGUE, DONALD C, AND SPRUIELL, JOSEPH E; RADIAL VARIATIONS IN MELT-SPUN FIBERS (INT-8112606); 24 MONTHS \$6,250

SELLIN, IVAN A, AND ELSTON, STUART B; COOPERATIVE RESEARCH PROGRAM CONCERNING THE PHYSICS OF ELECTRON PRODUCTION IN HIGH-VELOCITY ION-ATOM AND ION-SOLID COLLISIONS (INT-8116298); 24 MONTHS \$19,936

PIMM, STUART L; TESTS OF THE FACTORS LIMITING FOOD CHAIN LENGTH (INT-8200514); 18 MONTHS \$20,750

BREAZEALE, MARK A; STUDY OF NONLINEAR BEHAVIOR OF BULK AND SURFACE ACOUSTIC WAVES (INT-8204066); 36 MONTHS \$10,319

SMITH, WALKER O; GRAZING PATTERNS OF CLUPEOID FISHES IN WATERS OFF PERU (INT-8210646); 12 MONTHS \$9,736

MUELLER, GREGORY M; GENETIC STUDIES OF THE MUSHROOM GENUS LACCARIA (INT-8211779); 6 MONTHS \$2,883

VANDERBILT UNIVERSITY

FLEISCHER, SIDNEY; U.S.-JAPAN JOINT SEMINAR: STRUCTURE AND FUNCTION OF SARCOPLASMIC RETICULUM/NOVEMBER 1982/KOBE-OSAKA, JAPAN (INT-8121353); 12 MONTHS \$16,325

TEXAS

BAYLOR COLLEGE OF MEDICINE

MELNICK, JOSEPH L; MOLECULAR BIOLOGY OF ROTAVIRUS SEROTYPES (INT-8116115); 36 MONTHS \$44,238

RICE UNIVERSITY

JACO, WILLIAM H, AND BIRMAN, JOAN S; U.S.-JAPAN JOINT SEMINAR: LOW DIMENSIONAL MANIFOLD THEORY, HONOLULU, HAWAII/ JANUARY 1982 (INT-8100473); 12 MONTHS \$9,859

TEXAS A & M UNIVERSITY

SCHWEIKERT, EMILE A; RUTHERFORD BACKSCATTERING WITH HEAVY ION BEAMS (INT-8116153); 24 MONTHS \$15,000

TEXAS A & M UNIVERSITY-TEXAS AGRICULTURAL EXTENSION SERVICE

JOHNSON, STERLING K; DISEASES OF CULTURED SHRIMP IN TAIWAN AND THE UNITED STATES (INT-8206614); 18 MONTHS \$4,000

TEXAS A & M UNIVERSITY-TEXAS ENGINEERING EXPERIMENT STATION

HALL, KENNETH R, HOLSTE, JAMES C, AND EUBANK, PHILIP T; THERMODYNAMIC PROPERTIES OF NATURAL GAS SYSTEMS (INT-7817732 A01); 12 MONTHS \$3,200

UNIV OF TEXAS AT AUSTIN

VANDEN BOUT, PAUL A; A CENTIMETER AND MILLIMETER-WAVELENGTH STUDY OF GALACTIC STAR FORMATION (INT-8102957 A01); 12 MONTHS \$15,537

ZIEGLER, D M; METABOLIC OXYGENATION OF XENOBIOTIC SULFUR SUBSTRATES (INT-8114867); 12 MONTHS \$1,900

SWINNET, HARRY L; THE EFFECT OF NOISE ON A NONEQUILIBRIUM CHEMICAL REACTION (INT-8115872); 36 MONTHS \$10,000

SWINNEY, HARRY L, AND HORSTHEMKE, WERNER; THE EFFECT OF NOISE ON A NONEQUILIBRIUM CHEMICAL REACTION (INT-8115872 A01); \$6,000

MATZNER, RICHARD A, SHEPLEY, LAWRENCE C, AND TEITELBOIM, CLAUDIO; GRAVITATION THEORY AND GENERAL RELATIVITY (INT-8201927); 24 MONTHS \$15,950

BREGER, MICHEL; COMPLEX STELLAR PULSATIONS (INT-8207396); 12 MONTHS \$19,646

UNIV OF TEXAS AT DALLAS

CANTRELL, CYRUS D; INFLUENCE OF OPTICAL PROPAGATION EFFECTS ON MULTIPLE-PHOTON EXCITATION OF POLYATOMIC MOLECULES (INT-8116435); 24 MONTHS \$9,000

COLLINS, CARL B; HIGH PRESSURE REACTION KINETICS (INT-8116436); 12 MONTHS \$4,056

COLLINS, CARL B; HIGH PRESSURE REACTION KINETICS (INT-8116436 A01); 12 MONTHS \$7,190

TINSLEY, BRIAN A, AND ROHRBAUGH, RONALD P; STUDY OF OPTICAL EMISSIONS DUE TO ENERGETIC NEUTRAL ATOM PRECIPITATION (THE EQUATORIAL AURORA) (INT-8202410); 24 MONTHS \$20,000

CANTRELL, CYRUS D; QUANTITATIVE STUDIES OF MOLECULAR MULTIPLE-PHOTON EXCITATION IN POLYATOMIC MOLECULES (INT-8202413); 36 MONTHS \$8,925

UNIVERSITY OF HOUSTON CENTRAL CAMPUS

NEREM, ROBERT M; SPECIALISTS' MEETING ON 'FLUID DYNAMICS AS A LOCALIZING FACTOR IN ATHEROGENESIS'; HEIDELBERG, FEDERAL REPUBLIC OF GERMANY, JUNE 1982 (INT-8121887); 12 MONTHS \$13,324

UTAH

UNIVERSITY OF UTAH

BODILY, DAVID M; U.S.-JAPAN JOINT SEMINAR: CHEMISTRY OF COAL LIQUEFACTION / SALT LAKE CITY, UTAH/ JANUARY, 1982 (INT-8105574); 12 MONTHS \$1,172

ANDRADE, JOSEPH D; PROTEIN ADSORPTION ON DEFINED POLYMERIC MONOLAYERS (INT-8202351); 24 MONTHS \$12,400

DURNEY, C; U.S.-BELGIUM JOINT SEMINAR ON BIOELECTROMAGNETICS RESEARCH; GENT, BELGIUM - SEPTEMBER 26-28, 1982 (INT-1206322); 12 MONTHS \$6,400

UTAH STATE UNIVERSITY

CALDWELL, MARTYN M; SPECIAL FOREIGN CURRENCY AWARD (IN INDIAN AND U.S. CURRENCY) FOR GROUP TRAVEL TO A WORKSHOP IN THE EFFECTS OF ULTRAVIOLET RADIATION ON PLANTS (INT-8210527*); 12 MONTHS \$650

VIRGINIA

OLD DOMINION UNIVERSITY

CHAUDHRY, M HANIF; WORKSHOP ON HYDRAULIC TRANSIENTS IN CLOSED CONDUITS, JULY 1982, SAO PAULO, BRAZIL (INT-8116095); 12 MONTHS \$9,120

SRI INTERNATIONAL-STRATEGIC STUDIES CENTER

FOSTER, RICHARD B; SUPPORT OF INTERNATIONAL SCIENCE ACTIVITIES (INT-7818699 A07*); 7 MONTHS \$14,750

FOSTER, RICHARD B; SUPPORT OF INTERNATIONAL SCIENCE ACTIVITIES (157-8214187*); 24 MONTHS \$182,233

UNIVERSITY OF VIRGINIA

FREDRICK, LAURENCE W, AND IANNA, PHILIP; PARALLAXES AND PROPER MOTIONS OF SELECTED STARS (AST-8200232*); 12 MONTHS \$11,350

THORNTON, STEPHEN T. MEASUREMENT OF UNKNOWN NUCLEAR MASSES (INT-8204404); 36 MONTHS \$20,000
 MINEHART, RALPH C. AND ZIOCK, KLAUS O. COLLABORATION WITH EUROPEAN GROUPS IN MEDIUM ENERGY PHYSICS EXPERIMENTS AT THE SWISS INSTITUTE FOR NUCLEAR RESEARCH (INT-8207337); 24 MONTHS \$8,520

CAPLOW, THEODORE. U.S. FRANCE SEMINAR ON WORK AND THE FAMILY: JUNE 1983 IN ARC-ET-SENANS, FRANCE (INT-8212057); 12 MONTHS \$20,000

VIRGINIA MILITARY INSTITUTE

RIETHMILLER, STEVEN. THE SYNTHESIS AND VIBRATIONAL SPECTRA OF AMMINE TRICHLORO AND TRIBROMOGALLANE AND PHOSPHINE TRICHLORO AND TRIBROMOGALLANE (INT-8201230); 12 MONTHS \$16,150

VIRGINIA POLYTECHNIC INSTITUTE

TROWER, W. PETER, AND FICENEC, JOHN R. CHARMED PARTICLE LIFETIMES (INT-8026058 A01); 12 MONTHS \$16,094

PALMER, JAMES K. STUDY OF CARBOHYDRATES OCCURRING IN SWEET POTATOES (INT-8116072); 36 MONTHS \$20,000

TROWER, W. PETER. SFC AWARD (PAKISTANI CURRENCY AND U.S. DOLLARS) FOR GROUP TRAVEL GRANT FOR U.S. PARTICIPATION IN THE 7TH INTERNATIONAL SUMMER COLLEGE ON PHYSICS & CONTEMPORARY NEEDS-JUNE 1982 (INT-8200037*); 12 MONTHS \$1,100

RAHMAN, SAIFUR. A METHODOLOGY FOR ASSESSING SMALL-SCALE SOURCES OF ELECTRICAL ENERGY IN BANGLADESH (INT-8200483); 18 MONTHS \$9,902

WASHINGTON

UNIVERSITY OF WASHINGTON

ZARET, THOMAS M. ECOLOGY AND LIMNOLOGY OF VARZEA LAKES OF THE AMAZON (BSR-8003203 A02*); 12 MONTHS \$20,000

KOBAYASHI, ALBERT S. U.S.-JAPAN COOPERATIVE SEMINAR ON FRACTURE TOLERANCE EVALUATION/ HONOLULU, HAWAII/ DECEMBER, 1981 (INT-8100470); 12 MONTHS \$11,170

POLLACK, GERALD B. U.S.-JAPAN JOINT SEMINAR: CROSS BRIDGE MECHANISMS IN MUSCLE CONTRACTION/SEA/TLE, WA/JUNE 1982 (INT-8100471); 12 MONTHS \$12,080

RICHEY, JEFFREY E. THE BIOGEOCHEMISTRY OF CARBON IN THE AMAZON RIVER: AN ASSESSMENT (DEB-8107522*); 12 MONTHS \$20,000

MARTIN, GEORGE M. U.S.-JAPAN JOINT SEMINAR: PATHOGENETIC MECHANISMS IN WERNER'S SYNDROME AND THEIR ROLE IN HUMAN AGING/DECEMBER, 1982/ KOBE, JAPAN (INT-8120848); 15 MONTHS \$14,144

HOLTON, JAMES R. U.S.-JAPAN JOINT SEMINAR: DYNAMICS OF THE MIDDLE ATMOSPHERE HONOLULU, HI/OCTOBER, 1982 (INT-8120862); 6 MONTHS \$7,572

GARTLER, STANLEY M. U.S.-ITALY WORKSHOP ON MOLECULAR BIOLOGY OF X CHROMOSOME EXPRESSION AND INACTIVATION: NAPLES, ITALY, NOVEMBER 1-4, 1982 (INT-8203569); 18 MONTHS \$18,100

KOHN, ALAN J. ADAPTIVE RADIATION AND PALEOECOLOGY OF MARINE GASTROPOD MOLLUSCS IN FIJI (INT-8207270); 18 MONTHS \$10,018

WASHINGTON STATE UNIVERSITY

SCHROEDER, PAUL C. OVARIAN ULTRASTRUCTURE AND THE MECHANISM OF OVULATION IN THE EGG-LAYING MAMMALS (MONOTRE-MATA) (INT-8113064); 10 MONTHS \$5,000

EDWARDS, GERALD E. CONTROL OF PHOTOSYNTHETIC CARBON METABOLISM BY ENVIRONMENTAL CONDITIONS (INT-8201446); 24 MONTHS \$22,839

WISCONSIN

UNIVERSITY OF WISCONSIN-MADISON

BOOM, R. W. U.S.-JAPAN COOPERATIVE SEMINAR ON SUPER-CONDUCTIVE ENERGY STORAGE/ MADISON, WISCONSIN/ OCTOBER, 1981 (INT-8100475); 12 MONTHS \$8,107

LUND, DARYL B. COOPERATIVE RESEARCH ON FOULING OF HEAT TRANSFER SURFACES IN FOOD PROCESSING SYSTEMS (INT-8120130); 24 MONTHS \$19,758

MARGARITONDO, GIORGIO. USE OF SYNCHROTRON RADIATION TO INVESTIGATE SEMICONDUCTOR INTERFACES (INT-8123013); 36 MONTHS \$12,900

WYOMING

UNIVERSITY OF WYOMING

BOYER, DON L. INVESTIGATION OF TOPOGRAPHIC EFFECTS ON ROTATING FLOWS (INT-8116114); 12 MONTHS \$5,000

BOYER, DON L. INVESTIGATION OF TOPOGRAPHIC EFFECTS ON ROTATING FLOWS (INT-8116114 A01); \$9,185

INTERGOVERNMENTAL AND PUBLIC SERVICE SCIENCE AND TECHNOLOGY

CALIFORNIA

NAVAL WEAPONS CENTER

LINSTEADT, GEORGE F. IMPLEMENTATION/EVALUATION OF AN EXPANDED FEDERAL LABORATORY CONSORTIUM FOR TECHNOLOGY TRANSFER (FLC) (RII-7926511 A02); 12 MONTHS \$15,000

LINSTEADT, GEORGE F. IMPLEMENTATION/EVALUATION OF AN EXPANDED FEDERAL LABORATORY CONSORTIUM FOR TECHNOLOGY TRANSFER (FLC) (RII-7926511 A03); \$8,000

SOUTHWEST INNOVATION GROUP INC

MURDOCH, KEITH A. IMPLEMENTATION OF A REGIONAL SCIENCE AND TECHNOLOGY NETWORK (RII-7917656 A03); 6 MONTHS \$30,000

COLORADO

NATIONAL CONFERENCE OF STATE LEGISLATURES

MACKEY, EARL S. SCIENCE AND TECHNOLOGY IN STATE LEGISLATURES (RII-7717799 A06); 6 MONTHS \$7,160

MACKEY, EARL S. STRENGTHENING OF MODEL INTERSTATE SCIENTIFIC AND TECHNICAL INFORMATION CLEARINGHOUSE (MISTIC) (291-8213623); 12 MONTHS \$15,669

THE TRENDTRACK COMPANY

HOGAN, RONALD W. AND WELLER, BART C. A STUDY TO EXAMINE THE APPLICABILITY AND THE ISSUES MANAGEMENT IN THE PUBLIC SECTOR AT STATE AND LOCAL LEVELS (RII-8212692); 9 MONTHS \$27,385

DISTRICT OF COLUMBIA

NATIONAL GOVERNORS' ASSOCIATION-COUNCIL OF STATE PLANNING AGENCIES

WISE, ROBERT N. STATE PLANNING AND POLICY DEVELOPMENT TOOLS AND TECHNIQUES (RII-7927058 A04); 12 MONTHS \$40,000

NATIONAL GOVERNORS' ASSOCIATION

FARBER, STEPHEN B. SCIENCE AND TECHNOLOGY IN THE STATE EXECUTIVE BRANCH (RII-7720657 A08); 9 MONTHS \$50,000

PUBLIC TECHNOLOGY INC

PARKER, JOHN K. COMMUNITY TECHNOLOGY INITIATIVES PROGRAM (RII-7918742 A05); 8 MONTHS \$150,000

FLORIDA

FLORIDA INNOVATION GROUP INC

HAVLICK, J. ROBERT, AND FARMER, B. HAROLD. IMPLEMENTATION: THE FLORIDA INNOVATION GROUP (RII-8015663 A03); 4 MONTHS \$25,000

MARYLAND

CAPITAL SYSTEMS GROUP INC

CLANSKY, KENNETH B. SUPPORT SERVICES FOR RESEARCH INFORMATION PROCESSING AND DISSEMINATION PROGRAMS (PRM-8020049 A04*); \$16,248

NORTH CAROLINA

UNIVERSITY OF NORTH CAROLINA AT CHARLOTTE

BENSON, JONATHAN; IPA MOBILITY ASSIGNMENT (JONATHAN BENSON) (RII-8203681); 4 MONTHS \$13,819

RHODE ISLAND

RHODE ISLAND LEAGUE OF CITIES AND TOWNS

PAYNE, KENNETH F. INTERGOVERNMENTAL TECHNOLOGY UTILIZATION IN NEW ENGLAND (RII-8024008 A03); 6 MONTHS \$69,000

VIRGINIA

GEORGE MASON UNIVERSITY

WETMORE, WILLIAM; IPA MOBILITY ASSIGNMENT (061-8206594*); 12 MONTHS \$2,000

COORDINATED AGENCY-WIDE RESEARCH ACTIVITIES

ALABAMA

TUSKEGEE INSTITUTE

DAVIDSON, JOHN P. THE EFFECTS OF HISU ON CONTROL OF MACROMOLECULAR SYNTHESIS (PRM-8208510*); 36 MONTHS \$146,207

UNIVERSITY OF ALABAMA IN HUNTSVILLE

YOUNG, RONALD B. ACQUISITION OF ULTRACENTRIFUGE EQUIPMENT FOR SKELETAL MUSCLE RESEARCH (PRM-8120163); 12 MONTHS \$34,940

ARIZONA

ARIZONA STATE UNIVERSITY

RUEDA, ROBERTO, AND PRIETO, ALFONSO. COGNITIVE DEVELOPMENT, LINGUISTIC PROFICIENCY AND COMMUNICATIVE COMPETENCE (PRM-8117455*); 24 MONTHS \$60,394

UNIVERSITY OF ARIZONA

VELEZ, WILLIAM Y. RADICAL EXTENSIONS AND NUMBER THEORY (MATHEMATICAL SCIENCES) (PRM-8213782*); 24 MONTHS \$26,359

ARKANSAS

ARKANSAS STATE UNIVERSITY MAIN CAMPUS

HARP, GEORGE L. ACQUISITION OF STEREO MICROSCOPE AND ACCESSORIES (PRM-8122108); 12 MONTHS \$8,847

UNIVERSITY OF ARKANSAS FAYETTEVILLE

LEONE, CHARLES A. AN EXPERIMENTAL PROGRAM TO STIMULATE COMPETITIVE RESEARCH: PHASE B IMPLEMENTATION PLAN IN ARKANSAS (PRM-8011447 A01); 12 MONTHS \$673,111

CALIFORNIA

CALIFORNIA STATE UNIVERSITY, LOS ANGELES

ROBLES, CARLOS D; PREDATOR FORAGING CHARACTERISTICS AND THE VERTICAL DISTRIBUTION OF PREY POPULATIONS ON A WARM TEMPERATE SHORE (PRM-820074*); 24 MONTHS \$60,194

INDIVIDUAL AWARD

WINNER, LANGDON; SUSTAINED DEVELOPMENT AWARD (291-801808 A01*); 36 MONTHS \$18,250

LAPPE, MARC; ETHICS, VALUES, RISK ASSESSMENT AND POLICY ANALYSIS (291-8114338 A01*); 12 MONTHS \$18,430

PETULLA, JOSEPH M; ETHICAL DIMENSIONS OF HAZARDOUS WASTE POLICY (291-8209521*); 40 MONTHS \$15,000

RESEARCH & EDUCATION INSTITUTE INC

CRANDALL, MARJORIE; VISITING PROFESSORSHIP FOR WOMEN IN SCIENCE & ENGINEERING (PRM-8211893); 12 MONTHS \$79,007

SAN DIEGO STATE UNIVERSITY

RING, MURPHY A; ACQUISITION OF MASS-SPECTROMETER AND ACCESSORIES FOR RESEARCH ON KINETICS OF SILYLENE REACTIONS (PRM-8111209); 12 MONTHS \$34,948

PONCE, VICTOR M; ACQUISITION OF COMPUTER GRAPHICS EQUIPMENT FOR RESEARCH IN HYDROLOGY (PRM-8112905); 12 MONTHS \$17,490

BURNETT, LOWELL J; ACQUISITION OF EQUIPMENT FOR A NUCLEAR MAGNETIC RESONANCE (PRM-8113582); 12 MONTHS \$9,193

STANFORD UNIVERSITY

ETTER, DELORES M; VISITING PROFESSORSHIP FOR WOMEN IN SCIENCE AND ENGINEERING (PRM-8211939); 21 MONTHS \$57,573

UNIVERSITY OF CALIFORNIA, RIVERSIDE

ASHE, JOHN H; POSTSYNAPTIC POTENTIATION IN MAMMALIAN SYMPATHETIC GANGLIA (PRM-8200575*); 36 MONTHS \$128,999

UNIVERSITY OF SOUTHERN CALIFORNIA

LOWE, MARIAN A; VISITING PROFESSORSHIP FOR WOMEN IN SCIENCE AND ENGINEERING (PRM-8211928); 14 MONTHS \$55,752

COLORADO

COLORADO STATE UNIVERSITY

ACKERMAN, ALAN; ETHICAL DILEMMAS IN THE CONDUCT OF SCIENCE IN AMERICAN INDIAN COMMUNITIES (RII-8023665 A01*); 18 MONTHS \$51,779

UNIVERSITY OF COLORADO AT BOULDER

AVERY, SUSAN K; VISITING PROFESSORSHIP FOR WOMEN IN SCIENCE AND ENGINEERING (PRM-8212029); 12 MONTHS \$61,265

CONNECTICUT

COMMUNITY RENEWAL TEAM OF GREATER HARTFORD, INC

GREGOIRE, ROGER G; PLANNING A TECHNICAL COMMUNICATION NETWORK FOR GREATER HARTFORD (RII-8209690); 12 MONTHS \$36,344

QUINNIPAC COLLEGE

KALOUSTIAN, KENNETH V. AND OPHEIM, DENNIS J; ACQUISITION OF SPECTROPHOTOMETER AND CHROMATOGRAPHY CABINET (PRM-8112994); 12 MONTHS \$14,965

DELAWARE

UNIVERSITY OF DELAWARE

DURBIN, PAUL T; SUSTAINED DEVELOPMENT AWARD (291-801808 A01*); 12 MONTHS \$16,750

DISTRICT OF COLUMBIA

HOWARD UNIVERSITY

SPENCER, MICHAEL, AND HARRIS, GARY L; BASIC RESEARCH IN III-V COMPOUND SEMICONDUCTOR MATERIALS FOR MICROWAVE APPLICATIONS (PRM-8216170); 12 MONTHS \$250,000

JOEL POPKIN & COMPANY

POPKIN, JOEL, AND ASHER, MARTIN A; CONTINUING DEVELOPMENT OF THE UNIVERSITY PRICE INDEXING SYSTEM (PLN-8216471); 18 MONTHS \$16,000

NATIONAL ACADEMY OF SCIENCES

HOFFMAN, ALLAN R; SUPPORT FOR COMMITTEE ON SCIENCE, ENGINEERING AND PUBLIC POLICY (COSEPP); (PLN-7913104 A06); 12 MONTHS \$208,400

SPINDEL, WILLIAM; THE MANAGEMENT OF HAZARDOUS CHEMICAL WASTES FROM LABORATORY OPERATIONS (PLN-8130834 A01); \$25,400

TREICHEL, MARY M; INTERNATIONAL COUNCIL OF SCIENTIFIC UNIONS PROGRAM (PLN-8200724); 12 MONTHS \$800,000

MCCRAY, LAWRENCE E; SUPPORT FOR THE PANEL ON SCIENTIFIC COMMUNICATION AND NATIONAL SECURITY (INT-8211991*); 9 MONTHS \$25,000

THOMPSON, MELVIN; IPA MOBILITY ASSIGNMENT (MELVIN THOMPSON) (OEO-8215283); 12 MONTHS \$66,940

HOFFMAN, ALLAN R; SEVEN RESEARCH BRIEFINGS TO BE DEVELOPED FOR THE OFFICE OF SCIENCE AND TECHNOLOGY POLICY AND SELECTED FEDERAL AGENCIES (PLN-8218330*); 7 MONTHS \$183,400

FLORIDA

BARRY COLLEGE

FREL, J KAREN; ACQUISITION OF GROWTH CHAMBER AND MICROSCOPE FOR BOTANICAL RESEARCH (PRM-8115655); 12 MONTHS \$19,242

FLORIDA ATLANTIC UNIVERSITY

MEDINA, FERNANDO D; ACQUISITION OF ARGON ION LASER FOR RAMAN SCATTERING STUDIES (PRM-8200460); 12 MONTHS \$25,850

FLORIDA INTERNATIONAL UNIVERSITY

LANDRUM, JOHN T; ACQUISITION OF AN AEROBIC GLOVE BOX FOR RESEARCH ON COPPER COMPOUNDS (PRM-8115166); 12 MONTHS \$8,000

UNIVERSITY OF SOUTH FLORIDA

O MALLET, REBECCA; ACQUISITION OF WAVEFORM RECORDER AND SIGNAL AVERAGER FOR RESEARCH IN CHEMISTRY (PRM-8119317); 12 MONTHS \$28,890

GEORGIA

AGNES SCOTT COLLEGE

FLIGER, JOHN F; ACQUISITION OF ULTRAMICROTOME AND ACCESSORIES (PRM-8201050); 12 MONTHS \$22,015

ATLANTA UNIVERSITY

BOTA, KOFI B; INVESTIGATIONS OF NONLINEAR DIFFERENCE EQUATIONS, MATRIX METHODS, AND SOLUTIONS OF OPERATOR AND INTEGRODIFFERENTIAL EQUATIONS (PRM-8215949); 27 MONTHS \$229,110

GEORGIA SOUTHERN COLLEGE

CLARK, FRANK C; ACQUISITION OF MICROCOMPUTER SYSTEM (PRM-8112909); 12 MONTHS \$12,825

HARTBERG, W KEITH; ACQUISITION OF DENSITOMETER (PRM-8112911); 12 MONTHS \$7,603

MCKEEVER, STURGIS A; ACQUISITION OF PHOTOMACROSCOPE AND ACCESSORIES (PRM-8120972); 12 MONTHS \$16,735

ILLINOIS

KNOX COLLEGE

FACTOR, ROBERT L; CASE STUDIES OF VALUE DILEMMAS IN CHEMISTRY FOR CLASSROOM USE (291-8210022*); 12 MONTHS \$10,753

NORTHERN ILLINOIS UNIVERSITY

KRESHECK, GORDON C; ACQUISITION OF DIFFERENTIAL SCANNING CALORIMETER FOR RESEARCH IN CHEMISTRY (PRM-8113377); 12 MONTHS \$27,325

NORTHWESTERN UNIVERSITY

BLUSTEIN, BONNIE E; VISITING PROFESSORSHIP FOR WOMEN IN SCIENCE & ENGINEERING (PRM-8212039); 17 MONTHS \$50,033

UNIVERSITY OF CHICAGO

RICE, PRUDENCE M; VISITING PROFESSORSHIP FOR WOMEN IN SCIENCE AND ENGINEERING (PRM-8211936); 21 MONTHS \$65,916

WESTERN ILLINOIS UNIVERSITY

SINGER, SAMUEL; ACQUISITION OF A FERMENTER AND ACCESSORIES FOR BACTERIAL INSECTICIDE RESEARCH (PRM-8119916); 12 MONTHS \$27,672

INDIANA

EARLHAM COLLEGE

MILAR, KATHARINE S; ACQUISITION OF MICROCOMPUTER FOR PSYCHOLOGICAL RESEARCH (PRM-8111816); 12 MONTHS \$5,800

INDIANA UNIVERSITY, BLOOMINGTON

CALDWELL, LYNTON K; CASE STUDIES OF SCIENCE, TECHNOLOGY, AND VALUES IN ENVIRONMENTAL CONFLICTS (291-8204988*); 19 MONTHS \$41,209

INDIANA UNIV-PURDUE UNIV AT INDIANAPOLIS

KEMPLE, M D; ACQUISITION OF EPR INSTRUMENTATION FOR BIOPHYSICAL RESEARCH (PRM-8104662); 12 MONTHS \$25,000

IOWA

INDIVIDUAL AWARD

MORRIS, DAVID B; THE LANGUAGES OF PAIN: A STUDY OF MEDICAL AND HUMAN VALUES (291-8209518*); 40 MONTHS \$12,000

KANSAS

UNIVERSITY OF KANSAS MAIN CAMPUS

GIRON, LOUIS T; NEURON-TARGET NEURON INTERACTION IN DEVELOPMENT AND REGENERATION OF THE SPINAL CORD (PRM-8120604*); 24 MONTHS \$90,000

WICHITA STATE UNIVERSITY

TAHER, SYED M; ACQUISITION OF HELIUM LEAK DETECTOR (PRM-8200087); 12 MONTHS \$9,890

KENTUCKY

BELLARMINE COLLEGE

KORN, ROBERT W; ACQUISITION OF GRAPHICS SYSTEM FOR PLANT CYTOLOGY RESEARCH (PRM-8116237); 12 MONTHS \$33,650

INDIVIDUAL AWARD

SHRADER-FRECHET, KRISTIN; *ETHICAL AND VALUE ISSUES IN SITING LOW-LEVEL RADIOACTIVE WASTE FACILITIES* (291-8209517*); 40 MONTHS \$9,024

UNIVERSITY OF KENTUCKY

THOMAS, HARVEY F.; *A COMPARATIVE STUDY OF THE MUTAGENIC POTENCIES OF NATURALLY OCCURRING CHEMICALS FROM THE FERMENTATION BROTHS OF ACTINOMYCETES WITH THEIR NOVEL STRUCTURAL DERIVATIVES* (PCM-8116247*); 24 MONTHS \$100,000

WILLIAMS, ARTHUR L.; *IN VITRO REGULATION OF E. COLI ADENYL CYCLASE GENE EXPRESSION* (PRM-8212383*); 12 MONTHS \$40,284

MAINE

UNIVERSITY OF MAINE, ORONO

HUTCHINSON, FREDERICK; *AN EXPERIMENTAL PROGRAM TO STIMULATE COMPETITIVE RESEARCH: PHASE B IMPLEMENTATION PLAN IN MAINE* (PRM-8011448 A02); 12 MONTHS \$301,575

BRAJTER-TOTH, ANNA, AND ANDEREGG, ROBERT J.; *ACQUISITION OF A HIGH EFFICIENCY L'OPHILIZATION SYSTEM* (PRM-8203534); 12 MONTHS \$5,100

MARYLAND

CAPITAL SYSTEMS GROUP INC

CLANSKY, KENNETH; *SUPPORT SERVICES FOR RESEARCH INFORMATION PROCESSING DISSEMINATION PROGRAMS* (06M-8020049 A03*); 12 MONTHS \$12,000

JOHNS HOPKINS UNIVERSITY

LYALL, KATHARINE C.; *EVALUATION OF THE EXPERIMENTAL PROGRAM TO STIMULATE COMPETITIVE RESEARCH* (PRM-8119714); 10 MONTHS \$126,513

MCCLOSKEY, MICHAEL, AND EGETH, HOWARD; *THE EXPERIMENTAL PSYCHOLOGIST IN COURT: THE ETHICS OF EXPERT TESTIMONY* (291-8209940*); 18 MONTHS \$19,326

THOMAS, GAIL E.; *UNDERSTANDING THE SELECTION OF ACADEMIC MAJORS AND CAREERS* (PRM-8212259*); 12 MONTHS \$79,539

NATIONAL BUREAU OF STANDARDS

LIDE, DAVID R.; *STANDARD REFERENCE DATA PROJECTS (SRD-8209123)*; 18 MONTHS \$250,000

UNIVERSITY OF MARYLAND, BALTIMORE COUNTY

AYER, H. HARVEY A.; *IPA MOBILITY ASSIGNMENT* (STI-8206016); 25 MONTHS \$80,000

MASSACHUSETTS

AMHERST COLLEGE

BLANKENSHIP, ROBERT E.; *ACQUISITION OF PHOTON-COUNTING SPECTROFLUOROMETER* (PRM-8113379); 12 MONTHS \$29,929

POCCIA, DOMINIC; *ACQUISITION OF LIQUID SCINTILLATION COUNTER* (PRM-8121330); 12 MONTHS \$19,900

ZAJONC, ARTHUR G.; *ACQUISITION OF A DATA ACQUISITION AND CONTROL SYSTEM FOR LASER-ATOMIC PHYSICS RESEARCH* (PRM-8121789); 12 MONTHS \$18,947

BABSON COLLEGE

PHILIPS, JAMES R.; *ACQUISITION OF OPTICAL MICROSCOPE AND ACCESSORIES FOR HISTOLOGICAL AND ECOLOGICAL RESEARCH* (PRM-8114797); 18 MONTHS \$9,889

COLLEGE OF THE HOLY CROSS

DITZLER, MAURI A.; *ACQUISITION OF FLUORESCENCE SPECTROFLUOROMETER* (PRM-8117525); 12 MONTHS \$34,955

HARVARD UNIVERSITY-SCHOOL OF PUBLIC HEALTH

LEVINS, RICHARD; *ETHICAL ISSUES IN AGRICULTURAL RESEARCH IN DEVELOPING COUNTRIES* (291-8204854*); 30 MONTHS \$73,562

INDIVIDUAL AWARD

HOLMES, HELEN B.; *TECHNOLOGY AND PRENATAL MEDICAL CARE: EXTENDING THE ETHICAL ANALYSIS* (291-8209516*); 40 MONTHS \$12,000

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

BUCCIARELLI, LOUIS L.; *VALUES IN ENGINEERING DESIGN* (291-8114659*); 16 MONTHS \$26,197

ASHFORD, NICHOLAS A.; *SOCIETAL CONTROLS FOR HEALTH AND SAFETY HAZARDS: AN HISTORICAL AND ETHICAL ASSESSMENT* (291-8120627*); 16 MONTHS \$76,784

HOLICK, ANN L.; *VISITING PROFESSORSHIP FOR WOMEN IN SCIENCE AND ENGINEERING* (PRM-8211920); 16 MONTHS \$85,082

NORTHEASTERN UNIVERSITY

ZELINSKI, JOSEPH J. AND METGHALCHI, MOHAMAD; *ACQUISITION OF A GAS ANALYSIS SYSTEM FOR AIR POLLUTANTS* (PRM-8203101); 12 MONTHS \$32,000

TUFTS UNIVERSITY

CHUDYK, WAYNE A.; *ACQUISITION OF ORGANIC ANALYSIS INSTRUMENTATION FOR ENVIRONMENTAL ENGINEERING RESEARCH* (PRM-8114621); 12 MONTHS \$35,000

SHULTZ, MARY JANE; *ACQUISITION OF SIGNAL RECORDER AND ACCESSORIES FOR RESEARCH IN INFRARED LASER CHEMISTRY* (PRM-8121915); 12 MONTHS \$34,520

UNIVERSITY OF MASSACHUSETTS, AMHERST

WILLIAMS, FLOYD L.; *REPRESENTATION THEORY AND COHOMOLOGY OF FLAG DOMAINS (MATHEMATICAL SCIENCES)* (PRM-820919*); 24 MONTHS \$28,463

WEINBERG, MICHAEL; *IPA MOBILITY ASSIGNMENT (MICHAEL WEINBERG)* (GPP-8210810); 1 MONTHS \$1,986

WORCESTER POLYTECHNIC INSTITUTE

KILDAHL, NICHOLAS K.; *ACQUISITION OF AN INERT ATMOSPHERE ENCLOSURE AND ULTRAVIOLET ACCESSORIES* (PRM-8115594); 12 MONTHS \$29,738

MICHIGAN

EASTERN MICHIGAN UNIVERSITY

HICKS, KENNETH W.; *IPA MOBILITY ASSIGNMENT (KENNETH W. HICKS)* (OAO-8218282); 12 MONTHS \$55,000

HOPE COLLEGE

ATTOH, KODJPOPA; *ACQUISITION OF POLARIZING MICROSCOPE FOR STUDY OF METAMORPHIC ROCKS* (PRM-8200005); 12 MONTHS \$15,357

MICHIGAN STATE UNIVERSITY

BONNER, JILL C.; *VISITING PROFESSORSHIP FOR WOMEN IN SCIENCE & ENGINEERING* (PRM-8211850); 23 MONTHS \$56,400

MICHIGAN TECHNOLOGICAL UNIVERSITY

BECK, DONALD R.; *ACQUISITION OF COMPUTER EQUIPMENT FOR RESEARCH IN PHYSICS AND MATERIALS* (PRM-8111589); 12 MONTHS \$23,430

MINNESOTA

COLLEGE OF ST. SCHOLASTICA

STEIN, PAUL J.; *ACQUISITION OF SPECTROFLUOROMETER* (PRM-8212322); 12 MONTHS \$12,000

MISSISSIPPI

JACKSON STATE UNIVERSITY

MACK, ALLY; *A COMPARATIVE ANALYSIS OF SOUTHERN BLACK LEGISLATIVE BEHAVIOR: A POST-1965 ASSESSMENT* (PRM-821283*); 36 MONTHS \$178,146

PERKINS, JAMES; *ESTABLISHMENT OF A CHEMICAL PHYSICS RESEARCH PROGRAM FOR THE STUDY OF MOLECULAR STRUCTURE AND DYNAMICS* (PRM-8216167); 36 MONTHS \$250,000

MONTANA

MONTANA STATE UNIVERSITY

DAYTON, IRVING E. AND STROBEL, GARY A.; *AN EXPERIMENTAL PROGRAM TO STIMULATE COMPETITIVE RESEARCH: PHASE B IMPLEMENTATION PLAN IN MONTANA* (PRM-8011449 A01); 12 MONTHS \$773,699

NEBRASKA

CREIGHTON UNIVERSITY

CIPOLLA, SAM J.; *ACQUISITION OF DATA ACQUISITION AND ANALYSIS SYSTEM FOR HEAVY-ION ATOM COLLISION MEASUREMENTS* (PRM-8210044); 12 MONTHS \$19,475

NEW HAMPSHIRE

INDIVIDUAL AWARD

GERT, BERNADETT; *CROSS DISCIPLINARY TEACHING OF ETHICS* (291-8018088 A02*); 12 MONTHS \$18,250

UNIVERSITY OF NEW HAMPSHIRE, DURHAM

SPILLER, JUDITH; *WASTE DISPOSAL IN THE OCEAN: DISTINGUISHING SCIENTIFIC FACT FROM ETHICAL DECISIONS IN NATIONAL POLICY* (291-8209981*); 12 MONTHS \$49,312

NEW JERSEY

PRINCETON UNIVERSITY

MULVEY, JOHN M.; *A STUDY OF ETHICAL ISSUES ASSOCIATED WITH COMPUTER-BASED DECISION PROCEDURES* (291-8114661*); 24 MONTHS \$66,820

RUTGERS UNIVERSITY

HYNDMAN, ARNOLD G.; *CYTOTOXICITY IN DEVELOPING VISUAL CELLS* (PRM-8212393*); 36 MONTHS \$181,174

SETON HALL UNIVERSITY

LOVE, L. J. AND BRITTAIN, HARRY G.; *ACQUISITION OF FLUORESCENCE SPECTROMETER AND ACCESSORIES FOR LUMINESCENCE STUDIES* (PRM-8111335); 12 MONTHS \$34,993

BRITTAIN, HARRY G.; *ACQUISITION OF LASER EQUIPMENT FOR CHEMICAL RESEARCH* (PRM-8112901); 12 MONTHS \$33,800

AUGUSTINE, ROBERT L.; *ACQUISITION OF A MASS SPECTROMETER FOR CATALYSIS RESEARCH* (PRM-8112908); 12 MONTHS \$34,860

NEW YORK

CITY COLLEGE

AKINS, DANIEL L.; *RAMAN SCATTERING BY SPECTRAL SENSITIZER DYES ON SURFACES (CHEMISTRY)* (PRM-8211093*); 36 MONTHS \$163,396

CITY UNIVERSITY OF NEW YORK SYSTEM OFFICE

YOUNG, JANIS D.; *VISITING PROFESSORSHIP FOR WOMEN IN SCIENCE & ENGINEERING* (PRM-8212040); 18 MONTHS \$45,332

COLGATE UNIVERSITY

LEWIS, DAVID K. AND SHEN, QUANG; ACQUISITION OF FLOW REACTOR FOR CHEMICAL DYNAMICS AND STRUCTURE STUDIES (PRM-8116358); 12 MONTHS \$34,105

DENOYER, LINDA K.; VISITING PROFESSORSHIP FOR WOMEN IN SCIENCE & ENGINEERING (PRM-8211952); 12 MONTHS \$40,310

COLLEGE AT PLATTSBURGH

WOEHR, JAMES R.; ACQUISITION OF OXYGEN BOMB CALORIMETER FOR ECOLOGICAL RESEARCH (PRM-8115417); 12 MONTHS \$6,044

COLUMBIA UNIVERSITY

NEUMARK, GERTRUDE F.; VISITING PROFESSORSHIP FOR WOMEN IN SCIENCE & ENGINEERING (PRM-8212024); 10 MONTHS \$51,700

CONSUMERS UNION FOUNDATION INC

SIEGEL, LAWRENCE J.; ETHICAL ISSUES AND VALUE CONFLICTS IN FOOD SAFETY DECISION MAKING (291-8205442*); 24 MONTHS \$51,200

CORNELL UNIVERSITY-CORNELL UNIVERSITY - ENDOWED

GOWATY, PATRICIA A.; VISITING PROFESSORSHIP FOR WOMEN IN SCIENCE AND ENGINEERING (PRM-8211996); 14 MONTHS \$56,175

INDIVIDUAL AWARD

CASSELL, ERIC J.; ETHICS, VALUES, AND COMMUNICATION IN MEDICAL PRACTICE (291-8018086 A02*); 12 MONTHS \$18,250

JASANOFF, SHEILA; SCIENTIFIC AND VALUE CONFLICTS IN REGULATING TOXIC SUBSTANCES (291-8209514*); 40 MONTHS \$73,000

ITHACA COLLEGE

KOCH, HEINZ F.; ACQUISITION OF EQUIPMENT FOR STUDY OF CHEMICAL KINETICS (PRM-8119549); 12 MONTHS \$33,000

NEW YORK UNIVERSITY

FUSFELD, HERBERT I. F.; A STUDY OF UNIVERSITY-INDUSTRY RESEARCH RELATIONSHIPS. EXTENSION AND SUPPLEMENT (NSB-8024731 A01); 24 MONTHS \$7,175

ST JOHN'S UNIVERSITY

KOVACS, JOSEPH; ACQUISITION OF PEPTIDE SYNTHESIZER, HF REACTION APPARATUS, U.V. MONITOR SYSTEM AND RECORDER (PRM-8114793); 12 MONTHS \$16,200

PISANO, MICHAEL A.; ACQUISITION OF KINETIC ANALYSIS SYSTEM (PRM-8114796); 12 MONTHS \$21,061

HIRSHFIELD, IRVIN N.; ACQUISITION OF ELECTROPHORESIS EQUIPMENT AND OXIDIZER FOR BIOLOGICAL RESEARCH (PRM-8118134); 12 MONTHS \$24,025

NORTH CAROLINA**DAVIDSON COLLEGE**

WILLIAMSON, JOHN H.; ACQUISITION OF SPECTROPHOTOMETER AND OTHER EQUIPMENT FOR RESEARCH ON GENETICS OF AGING (PRM-8117538); 12 MONTHS \$26,550

CARROLL, FELIX A. AND SCHUH, MERLYN D.; ACQUISITION OF A FLUORESCENCE SPECTROPHOTOMETER FOR RESEARCH IN PHOTOCHEMISTRY, PHOTOPHYSICS AND BIOCHEMISTRY (PRM-8118119); 12 MONTHS \$10,885

FAYETTEVILLE STATE UNIVERSITY

HOLMES, DEFIELD T.; PHOTODYNAMIC INACTIVATION DETERMINATION BY THE SPECTROPHOTOFUOROMETRIC METHOD (PRM-8200737*); 36 MONTHS \$57,943

UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL

YOUNG, LAI-SANG; VISITING PROFESSORSHIP FOR WOMEN IN SCIENCE AND ENGINEERING (PRM-8211895); 4 MONTHS \$13,550

UNIVERSITY OF NORTH CAROLINA AT GREENSBORO

HERMAN, HARVEY B.; ACQUISITION OF MAGNETIC RESONANCE AND INFRARED INSTRUMENTATION FOR CHEMISTRY RESEARCH (PRM-8120000); 12 MONTHS \$35,000

WAKE FOREST UNIVERSITY

JACKELS, CHARLES F.; ACQUISITION OF COMPUTER EQUIPMENT FOR QUANTUM CHEMICAL STUDY OF HYDROCARBON OXIDATION SPECIES (PRM-8121880); 12 MONTHS \$10,884

WESTERN CAROLINA UNIVERSITY

WALLACE, JAMES W.; ACQUISITION OF GAS-LIQUID CHROMATOGRAPHY EQUIPMENT FOR BOTANICAL TAXONOMY (PRM-8107442); 12 MONTHS \$24,992

NORTH DAKOTA**UNIVERSITY OF NORTH DAKOTA MAIN CAMPUS**

JALAL, SYED M.; ACQUISITION OF PHOTOMICROSCOPE FOR CYTOGENETIC RESEARCH (PRM-8120971); 12 MONTHS \$31,990

OHIO**COLLEGE OF WOOSTER**

BORDERS, CHARLES; ACQUISITION OF AMINO ACID ANALYZER (PRM-8120272); 12 MONTHS \$30,100

BORDERS, CHARLES; ACQUISITION OF AMINO ACID ANALYZER (PRM-8120272 A01); 12 MONTHS \$3,900

PETT, VIRGINIA B.; ACQUISITION OF SINGLE CRYSTAL X-RAY DIFFRACTION EQUIPMENT FOR RESEARCH IN CHEMISTRY AND GEOLOGY (PRM-8121555); 12 MONTHS \$31,770

MIAMI UNIVERSITY CENTRAL OFFICE

WINNER, ROBERT W.; ACQUISITION OF ENVIRONMENTAL CHAMBER FOR BIOLOGICAL AND WATER POLLUTION RESEARCH (PRM-8113375); 12 MONTHS \$14,000

OBERLIN COLLEGE

BENZING, DAVID H.; ACQUISITION OF SCANNING ELECTRON MICROSCOPE (PRM-8114632); 12 MONTHS \$33,185

OHIO STATE UNIVERSITY

BAUGHMAN, GEORGE W.; EXPANSION OF 'A PROJECT TO PERFORM DEVELOPMENTAL WORK ON ACADEMIC DISCIPLINE PRICE INDEXES' (29N-8017815 A04); 12 MONTHS \$50,000

UNIVERSITY OF CINCINNATI

BEAN, ALDEN S.; IPA MOBILITY ASSIGNMENT (ALDEN S. BEAN) (PAE-8119746 A01); 20 MONTHS \$13,980

WRIGHT STATE UNIVERSITY

CARRAHER, CHARLES E.; ACQUISITION OF A ULTRAVIOLET-VISIBLE-NEAR INFRARED SPECTROPHOTOMETER FOR RESEARCH IN CHEMISTRY (PRM-8111214); 12 MONTHS \$22,000

CARMICHAEL, WAYNE W.; ACQUISITION OF HIGH PERFORMANCE LIQUID CHROMATOGRAPH (PRM-8112916); 12 MONTHS \$21,570

OREGON**REED COLLEGE**

RUSSELL, PETER J.; ACQUISITION OF CENTRIFUGE, FREEZER AND OTHER EQUIPMENT FOR RIBOSOMAL DNA STUDIES (PRM-8114794); 12 MONTHS \$17,333

RHODES, DELL L. AND ROBERTS, WILLIAM J.; ACQUISITION OF 8-CHANNEL POLYGRAPH FOR NEUROLOGICAL STUDIES (PRM-8119316); 12 MONTHS \$15,051

PENNSYLVANIA**BRYN MAWR COLLEGE**

RICHMOND, GERALDINE L.; ACQUISITION OF AN ULTRAVIOLET WAVELENGTH EXTENDER ACCESSORY FOR LASER PHOTOACOUSTIC SPECTROSCOPY RESEARCH (PRM-8116869); 12 MONTHS \$26,000

CARNEGIE-MELLON UNIVERSITY

KADANE, JOSEPH B.; ETHICAL ISSUES IN THE DESIGN OF METAL TRIALS (291-8116310*); 30 MONTHS \$52,490

FRANKLIN AND MARSHALL COLLEGE

HARRIS, DANIEL C.; ACQUISITION OF A HIGH RESOLUTION INFRARED SPECTROPHOTOMETER (PRM-8121778); 12 MONTHS \$22,400

INDIVIDUAL AWARD

LAUDAN, LARRY L.; RESOLUTION OF VALUE DISAGREEMENTS IN SCIENCE AND TECHNOLOGY (291-8114337 A01*); 12 MONTHS \$18,192

INSTITUTE FOR SCIENTIFIC INFORMATION INC

COWARD, H. ROBERTS; USE OF SCIENCE CITATION INDEX DATABASE (1961 - 81) (EVL-7806769 A05); 12 MONTHS \$12,500

PENNSYLVANIA STATE UNIVERSITY

FRIEDMAN, ROBERT S.; POSTDOCTORAL EXPERIENCE IN THE DEPARTMENTAL AND ORU SETTINGS WITH SPECIAL EMPHASIS ON GENDER (PLN-7900665 A05); 6 MONTHS \$4,500

ST VINCENT COLLEGE

ATTNEAVE, CAROLYN L.; VISITING PROFESSORSHIP FOR WOMEN IN SCIENCE AND ENGINEERING (PRM-8212011); 23 MONTHS \$76,629

UNIVERSITY OF PENNSYLVANIA

JOFFE, CAROLE E.; VISITING PROFESSORSHIP FOR WOMEN IN SCIENCE AND ENGINEERING (PRM-8212012); 18 MONTHS \$45,519

PUERTO RICO**UNIVERSITY OF PUERTO RICO, RIO PIEDRAS**

MORENO, OSCAR; ACQUISITION OF COMPUTER SYSTEM FOR RESEARCH IN MATHEMATICS AND CHEMISTRY (PRM-8106085); 12 MONTHS \$34,554

NIEVES, JOSE F.; LOW ENERGY MANIFESTATIONS OF EXOTIC FERMIONS (PHYSICS) (PRM-8210212*); 24 MONTHS \$21,865

ABRUNA, HECTOR D.; PURCHASE OF SCANNING ELECTRON MICROSCOPE WITH ENERGY DISPERSIVE SPECTROMETER (SEM-EDS) (PRM-8216168); 12 MONTHS \$178,716

RHODE ISLAND**BROWN UNIVERSITY**

GOFF, LYNDA J.; VISITING PROFESSORSHIP FOR WOMEN IN SCIENCE AND ENGINEERING (PRM-8211834); 15 MONTHS \$51,939

COMMUNITY COLLEGE OF RHODE ISLAND

BANERJEE, PRANAB; ACQUISITION OF INFRARED SPECTROMETER (PRM-8105392); 12 MONTHS \$35,000

SOUTH CAROLINA**FURMAN UNIVERSITY**

KNIGHT, LON B.; ACQUISITION OF ELECTRON SPIN RESONANCE COMPUTER SYSTEM (PRM-8112996); 12 MONTHS \$34,112

KUBLER, DONALD G.; ACQUISITION OF LIQUID CHROMATOGRAPHY SYSTEM FOR RESEARCH IN CHEMISTRY (PRM-8113380); 12 MONTHS \$34,498

KANE-MAGUIRE, NOEL; ACQUISITION OF NUCLEAR MAGNETIC RESONANCE SPECTROSCOPE FOR CHEMICAL RESEARCH (PRM-8200375); 12 MONTHS \$30,935

UNIVERSITY OF SOUTH CAROLINA AT COLUMBIA

DURIG, JAMES R. AN EXPERIMENTAL PROGRAM TO STIMULATE COMPETITIVE RESEARCH: PHASE B IMPLEMENTATION PLAN IN SOUTH CAROLINA (PRM-8011451 A02); 12 MONTHS \$422,353

SOUTH DAKOTA

AUGUSTANA COLLEGE

PRESCOTT, LANSING M; ACQUISITION OF ULTRAMICROTOME & ACCESSORIES (PRM-8117909); 12 MONTHS \$20,716

SOUTH DAKOTA SCHOOL OF MINES AND TECHNOLOGY

ASHWORTH, T. ACQUISITION OF GUARDED PLATE APPARATUS FOR STUDY OF HEAT TRANSFER MECHANISMS (PRM-8205602); 12 MONTHS \$25,000

TEXAS

PAN AMERICAN UNIVERSITY

EDWARDS, ROBERT J; ACQUISITION OF SHALLOW DRAFT BOAT AND WATER ANALYZER SYSTEM FOR ECOLOGICAL RESEARCH (PRM-8115171); 12 MONTHS \$13,491

VERMONT

MIDDLEBURY COLLEGE

WOLFSON, RICHARD L. AND WINKLER, P. FRANK; ACQUISITION OF COMPUTER GRAPHICS FOR SPACE PHYSICS RESEARCH (PRM-8115421); 12 MONTHS \$19,945

VIRGINIA

COLLEGE OF WILLIAM AND MARY

THOMPSON, DAVID W; ACQUISITION OF GAS CHROMATOGRAPH AND ACCESSORIES (PRM-8114795); 12 MONTHS \$15,140

KAPPA SYSTEMS INC

ALDRIDGE, JANIS; PROVIDING SUPPORT SERVICES REQUIRED BY THE COMMISSION ON PRECOLLEGE EDUCATION IN MATHEMATICS, SCIENCE AND TECHNOLOGY (MST-8219377*); 19 MONTHS \$25,000

UNIVERSITY OF VIRGINIA

WILSON, MELVIN N; A SOCIAL INTERACTION ANALYSIS OF THREE-GENERATIONAL BLACK FAMILIES (PRM-8210411*); 24 MONTHS \$67,148

VIRGINIA MILITARY INSTITUTE

SAUDER, WILLIAM C. AND PETERS, PHILIP B; ACQUISITION OF HEAVY PARTICLE SOURCE FOR RESEARCH ON K X-RAY SPECTRA (PRM-8121953); 12 MONTHS \$17,500

WASHINGTON

SEATTLE PACIFIC UNIVERSITY

PHILLIPS, RONALD C; ACQUISITION OF LIQUID CHROMATOGRAPH AND ACCESSORIES (PRM-8116233); 12 MONTHS \$24,005

UNIVERSITY OF PUGET SOUND

BLAND, JEFFREY S; ACQUISITION OF GAS CHROMATOGRAPH TO STUDY ERYTHROCYTE MEMBRANE PHOTO-OXYGENATION PRODUCTS (PRM-8117805); 12 MONTHS \$33,550

WEST VIRGINIA

WEST VIRGINIA UNIVERSITY

VEHSE, WILLIAM E. AN EXPERIMENTAL PROGRAM TO STIMULATE COMPETITIVE RESEARCH: PHASE B IMPLEMENTATION PLAN IN WEST VIRGINIA (PRM-8011453 A01); 12 MONTHS \$693,749

WISCONSIN

MARQUETTE UNIVERSITY

FELDT, JEANETTE; ACQUISITION OF VACUUM HELIUM LEAK DETECTOR (PRM-8115416); 12 MONTHS \$18,510

UNIVERSITY OF WISCONSIN-MADISON

SIMKIN, SUSAN M; VISITING PROFESSORSHIP FOR WOMEN IN SCIENCE & ENGINEERING (PRM-8211851); 12 MONTHS \$56,075

OCEAN DRILLING & U.S. ANTARCTIC

OCEAN DRILLING PROGRAM

CALIFORNIA

LOCKHEED MISSILES AND SPACE COMPANY INC

PERKINS, WILLIAM F; SYSTEMS INTEGRATION CONTRACTOR (ODP-8121875); 12 MONTHS \$1,200,000
 PERKINS, WILLIAM F; SYSTEMS INTEGRATION CONTRACTOR (ODP-8121875 A02); \$2,795,000
 PERKINS, WILLIAM F; SYSTEMS INTEGRATION CONTRACTOR (ODP-8121875 A04); \$1,188,133

UNIVERSITY OF CALIFORNIA, SAN DIEGO-SCRIPPS INSTITUTION OF OCEANOGRAPHY

SAXON, DAVID S; DRILLING SEDIMENTS IN THE PACIFIC AND ATLANTIC OCEAN AND ADJACENT SEAS (ODP-6600025 A86); \$5,000,000
 SAXON, DAVID S; DRILLING SEDIMENTS IN THE PACIFIC AND ATLANTIC OCEAN AND ADJACENT SEAS (29P-6600025 A87); \$2,800,000
 NIERENBERG, WILLIAM A; DRILLING SEDIMENTS IN THE PACIFIC AND ATLANTIC OCEAN AND ADJACENT SEAS (ODP-6600025 A39); \$3,000,000
 NIERENBERG, WILLIAM A; DRILLING SEDIMENTS IN THE PACIFIC AND ATLANTIC OCEAN AND ADJACENT SEAS (16P-6600025 A90); \$2,200,000
 NIERENBERG, WILLIAM A; DRILLING SEDIMENTS IN THE PACIFIC AND ATLANTIC OCEAN AND ADJACENT SEAS (16P-6600025 A91*); \$68,175

DISTRICT OF COLUMBIA

NATIONAL ACADEMY OF SCIENCES-NATIONAL RESEARCH COUNCIL

PERKINS, DONALD W; ENGINEERING CONSIDERATIONS FOR CONTINUATION OF DEEP SEA DRILLING FOR SCIENTIFIC PURPOSES (ODP-8104383); 12 MONTHS \$130,000
 PERKINS, DONALD W; ENGINEERING CONSIDERATIONS FOR CONTINUATION OF DEEP SEA DRILLING FOR SCIENTIFIC PURPOSES, PHASE II (ODP-8104383 A01); 12 MONTHS \$130,000
 BERG, JOSEPH W; SUPPORT OF THE COMMITTEE ON OCEAN DRILLING (ODP-8121406 A01); \$55,000

MARYLAND

DOTY ASSOCIATES INC

WALTER, DONALD W; MANAGEMENT SUPPORT (ODP-8200009 A01); \$150,000
 WALTER, DONALD W; MANAGEMENT SUPPORT (ODP-8200009 A02); \$7,949

SEVERN GRAPHICS INC

ELCHIN, GEORGE; GRAPHIC ARTS SERVICES (PRM-8122154 A01); \$5,000

NEW YORK

JOINT OCEANOGRAPHIC INSTITUTIONS INC

CLOTWORTHY, JOHN H; SUPPORT OF JOI, INC. JOIDES OFFICE AND SCIENTIFIC SERVICE PROGRAM, CHALLENGER (ODP-7808082 A08); 12 MONTHS \$231,000
 CLOTWORTHY, JOHN H; SUPPORT OF JOI, INC. JOIDES OFFICE AND SCIENTIFIC SERVICE PROGRAM, CHALLENGER (ODP-7808082 A09); \$303,612
 CLOTWORTHY, JOHN H; SUPPORT OF U.S. SITE SURVEY PROGRAM (ODP-7821464 A07); 12 MONTHS \$834,870

VIRGINIA

DEPARTMENT OF NAVY-OFFICE OF NAVAL RESEARCH

HAMILTON, GORDON R; SUPPORT FOR THE NATIONAL ACADEMY OF ENGINEERING MARINE BOARD (OCE-8008009 A02*); 12 MONTHS \$3,000

GEOLOGICAL SURVEY

TELEKI, PAUL G; ACQUISITION OF GLORIA SITE SURVEY DATA (ODP-8210456); 12 MONTHS \$28,221

U.S. ANTARCTIC RESEARCH

ALASKA

UNIVERSITY OF ALASKA FAIRBANKS CAMPUS-GEOPHYSICAL INSTITUTE

WENDLER, GERD; ON THE KATABATIC WIND IN ANTARCTICA (DPP-8100161 A01); 12 MONTHS \$70,446

KIENLE, JUERGEN; SEISMOTECTONICS AND VOLCANOLOGY OF MT. EREBUS AND VICINITY (DPP-8117968); 12 MONTHS \$20,996

WILSON, CHARLES R; INFRASONIC WAVE OBSERVATIONS MADE AT WINDLESS BIGHT NEAR MCMURDO STATION (DPP-8120734); 12 MONTHS \$20,622

WILSON, CHARLES R; LOGISTICAL SUPPORT FOR INFRASONIC WAVE RESEARCH AT WINDLESS BIGHT, ANTARCTICA (DPP-8121689); 36 MONTHS \$1

ARIZONA

ARIZONA STATE UNIVERSITY

STUMP, EDMUND; PETROLOGY AND REGIONAL GEOLOGY OF EARLY TO MIDDLE PALEOZOIC MAGMATIC ROCKS, NORTHERN VICTORIA LAND, ANTARCTICA (DPP-8019991 A01); 12 MONTHS \$39,789

MALIN, MICHAEL C; CONTEMPORARY GEOMORPHIC PROCESSES IN ANTARCTIC DRY VALLEYS (DPP-8206391); 12 MONTHS \$19,318

CALIFORNIA

HUBBS-SEA WORLD RESEARCH INSTITUTE

JEHL, JOSEPH R. AND THOMAS, JEANETTE; CIRCUMPOLAR ANALYSIS OF THE MARINE MAMMAL FAUNAS OF THE PACK ICE, ANTARCTICA (DPP-8205761); 12 MONTHS \$43,159

LOCKHEED MISSILES AND SPACE COMPANY INC-LOCKHEED PALO ALTO RESEARCH LABORATORY

MENDE, STEPHEN B; ANTARCTIC AURORAL IMAGING (DPP-8016574 A01); 12 MONTHS \$59,810

POINT REYES BIRD OBSERVATORY

AINLEY, DAVID G; POPULATION BIOLOGY OF SOUTH POLAR SKUAS (DPP-7920796 A02); 12 MONTHS \$24,809

TRIVELPIECE, WAYNE Z. AND VOLKMAN, NICHOLAS J; COMPARATIVE BEHAVIORAL AND ECOLOGICAL STUDIES OF PYGOSCELID PENGUINS IN ADMIRALTY BAY (DPP-8117205 A01); 12 MONTHS \$66,065

SAN DIEGO HALL OF SCIENCE

LANEY, JACK, STEVENS, PAYSON R. AND TILTON, ROGER; 16MM AND OMNIMAX FILM 'PORTRAIT OF ANTARCTICA' (DPP-8118124); 12 MONTHS \$1

SAN DIEGO SOCIETY OF NATURAL HISTORY

SHULENBERGER, ERIC; ANALYSIS OF ANTARCTIC ZOOPLANKTON SAMPLES (DPP-8120492); 12 MONTHS \$18,384

STANFORD UNIVERSITY

CARPENTER, DONALD L. AND KATSURFRAKIS, JOHN P; VERY LOW FREQUENCY PROBING OF THE MAGNETOSPHERE FROM PALMER STATION, ANTARCTICA (DPP-7924600 A02); 12 MONTHS \$118,000

HELLIWELL, ROBERT A; ACTIVE AND PASSIVE VERY LOW FREQUENCY WAVE-PARTICLE INTERACTION EXPERIMENTS ON THE MAGNETOSPHERE FROM SIPLE STATION, ANTARCTICA (DPP-8022282 A01); 12 MONTHS \$326,160

UNIVERSITY OF CALIFORNIA, BERKELEY-BODEGA MARINE LABORATORY

RISEBROUGH, ROBERT W; FLUXES OF SYNTHETIC ORGANIC, BIOGENIC AND PETROLEUM-DERIVED COMPOUNDS THROUGH ANTARCTIC MARINE FOOD WEBS SUPPORTING AND DEPENDENT UPON KRILL (DPP-7722169 A03); 12 MONTHS \$44,637

UNIVERSITY OF CALIFORNIA, DAVIS

CARROLL, JOHN J; STUDIES OF ATMOSPHERIC ENERGY TRANSFER PROCESSES AT THE SOUTH POLE (DPP-8116747); 18 MONTHS \$70,000

FEENEY, ROBERT E; COLLECTION OF BLOOD SERUM FROM ANTARCTIC FISH (DPP-8116963); 12 MONTHS \$9,338

UNIVERSITY OF CALIFORNIA, IRVINE

HUNT, GEORGE L; MARINE BIRD DISTRIBUTION IN RELATION TO KRILL IN THE EAST WIND DRIFT, ANTARCTICA (DPP-8206052); 12 MONTHS \$24,615

UNIVERSITY OF CALIFORNIA, LOS ANGELES

ERNST, WALLACE G. AND GREW, EDWARD S; PETROLOGY OF PRE-CAMBRIAN CRYSTALLINE ROCKS IN ANTARCTICA (DPP-8019527 A01); 12 MONTHS \$45,000

HAMNER, WILLIAM M; THE BEHAVIOR OF EUPHAUSIA SUPERBA IN ANTARCTICA (DPP-8023851 A01); 12 MONTHS \$87,687

KNOPOFF, LEON; ULTRA-LONG PERIOD SEISMIC AND GRAVITY OBSERVATIONS AT SOUTH POLE, ANTARCTICA (DPP-8117325); 12 MONTHS \$159,318

UNIVERSITY OF CALIFORNIA, SAN DIEGO-SCRIPPS INSTITUTION OF OCEANOGRAPHY

HOLM-HANSEN, OSMUND; PHYTOPLANKTON STANDING CROP AND PRODUCTIVITY IN THE EAST WIND DRIFT, ANTARCTICA (DPP-8212362); 12 MONTHS \$26,049

UNIVERSITY OF CALIFORNIA, SANTA BARBARA

ROSS, ROBIN M. QUETIN, LANGDON B. AND COX, JAMES L; EGG PRODUCTION AND THE SURVIVORSHIP OF LARVA OF ANTARCTIC KRILL (DPP-8020739 A01); 12 MONTHS \$91,007

ROBISON, BRUCE H; THE TROPHODYNAMICS OF THE MESOPELAGIC FAUNA IN SOUTHERN OCEAN ECOSYSTEMS (DPP-8119621 A01); 12 MONTHS \$42,306

UNIVERSITY OF SOUTHERN CALIFORNIA

SULLIVAN, CORNELIUS W; FACTORS WHICH INFLUENCE THE GROWTH AND DEVELOPMENT OF SEA ICE MICROBIAL COMMUNITIES (DPP-8117237); 12 MONTHS \$99,120

COLORADO

COLORADO SCHOOL OF MINES

ASKIN, ROSEMARY A; CRETACEOUS AND EARLY TERTIARY PALYNOLOGY OF THE JAMES ROSS ISLAND AREA, ANTARCTICA (DPP-8020095 A01); 12 MONTHS \$49,692

UNIVERSITY OF COLORADO AT BOULDER

KOMARKOVA, VERA; PLANT COMMUNITIES OF THE ANTARCTIC PENINSULA NEAR PALMER STATION (DPP-8201047); 12 MONTHS \$41,352

UNIVERSITY OF COLORADO AT DENVER

LEMASURIER, WESLEY E; VOLCANIC GEOLOGY OF MARIE BYRD LAND AND ITS RELATIONSHIPS TO GLACIAL AND TECTONIC HISTORY IN WEST ANTARCTICA (DPP-8020836 A01); 12 MONTHS \$21,000

UNIVERSITY OF DENVER

MURCRAE, DAVID G; MEASUREMENT OF THE COLUMN DENSITIES OF H₂O, HNO₃, CF₂Cl₂, CFC₂Cl₃ AND O₃ DURING THE ANTARCTIC WINTER (DPP-8118065); 18 MONTHS \$149,157

CONNECTICUT

RUSS KINNE INC

KINNE, RUSS; PHOTOGRAPHIC DOCUMENTATION OF THE U.S. ANTARCTIC RESEARCH PROGRAM, 1981-1982 (DPP-8201434); 6 MONTHS \$14,202

DELAWARE

FRANKLIN INSTITUTE-BARTOL RESEARCH FOUNDATION

POMERANTZ, MARTIN A; INVESTIGATIONS OF COSMIC RAY INTENSITY VARIATIONS IN ANTARCTICA (DPP-7923218 A02); 12 MONTHS \$176,220

POMERANTZ, MARTIN A; SURVEY OF THE GALACTIC SUBMILLIMETRIC EMISSION IN THE SOUTHERN HEMISPHERE (EMILIE EXPERIMENT) (DPP-8120258); 24 MONTHS \$18,900

DISTRICT OF COLUMBIA

AMERICAN GEOPHYSICAL UNION

SPIELHAUS, A F; PUBLICATION OF THE ANTARCTIC RESEARCH SERIES (DPP-8019997 A01); 12 MONTHS \$60,000

DEPARTMENT OF DEFENSE

PEARIGEN, JARE M; LOGISTIC SUPPORT OF THE U.S. PROGRAM IN ANTARCTICA (DPP-7610886 A29); \$25,000,000

PEARIGEN, JARE M; LOGISTIC SUPPORT OF THE U.S. PROGRAM IN ANTARCTICA (DPP-7610886 A30); \$22,137,000

PEARIGEN, JARE M; NOSE LANDING GEAR STRUT ASSEMBLIES FOR LC-130 AIRCRAFT (DPP-7610886 A31); 6 MONTHS \$140,000

SHOEMAKER, BRIAN H; LOGISTIC SUPPORT OF THE U.S. PROGRAM IN ANTARCTICA (PROCUREMENT OF AIRCRAFT COMPONENTS) (DPP-7610886 A32); 6 MONTHS \$467,102

SHOEMAKER, BRIAN H; LOGISTIC SUPPORT OF THE U.S. PROGRAM IN ANTARCTICA (DPP-7610886 A33); 6 MONTHS \$1,900,000

DEPARTMENT OF NAVY-NAVAL FACILITIES ENGINEERING COMMAND

COOK, J W; ENGINEERING SUPPORT FOR A NEW U.S. ANTARCTIC PROGRAM STAGING FACILITY AT CHRISTCHURCH, NEW ZEALAND (DPP-8213765); 12 MONTHS \$65,562

DEPARTMENT OF NAVY-NAVSEA SYSTEMS COMMAND

KELLY, THOMAS P; TECHNICAL SUPPORT FOR POLAR RESEARCH PROGRAMS (DPP-7820114 A04*); 12 MONTHS \$50,000

DEPARTMENT OF TRANSPORTATION-U S COAST GUARD

CCSTELLO, JOHN D; SERVICES OF USCG ICEBREAKERS, ANTARCTIC SEASON 1981-82 (DPP-8024892 A01*); \$1,450,000

CCSTELLO, JOHN D; SERVICES OF USCG ICEBREAKERS, ANTARCTIC SEASON 1981-82 (DPP-8024892 A02); 6 MONTHS \$75,825

GEORGE WASHINGTON UNIVERSITY

STEPHENS, GEORGE C; IPA MOBILITY ASSIGNMENT (DPP-8218646*); 12 MONTHS \$20,932

LIBRARY OF CONGRESS

THURONYI, GEZA T; ABSTRACTING AND INDEXING SERVICE FOR CURRENT ANTARCTIC LITERATURE (DPP-7001013 A11); 12 MONTHS \$139,289

THURONYI, GEZA T; ABSTRACTING AND INDEXING SERVICE FOR CURRENT ANTARCTIC LITERATURE (DPP-7001013 A12); 12 MONTHS \$143,067

NATIONAL ACADEMY OF SCIENCES

HART, PEMBROKE J; SUPPORT OF THE GEOPHYSICS RESEARCH BOARD (GRB) AND THE COMMITTEE ON SOLAR-TERRESTRIAL RESEARCH (CSTR) (02M-8122148*); 12 MONTHS \$2,750

HUSHEN, TIMOTHY W; SUPPORT FOR THE POLAR RESEARCH BOARD (DPP-8207096*); 12 MONTHS \$62,500

HUSHEN, W TIMOTHY; UNITED STATES PARTICIPATION IN THE BIOLOGICAL INVESTIGATIONS OF MARINE ANTARCTIC SYSTEMS AND STOCKS (BIOMASS) PROGRAM (DPP-8212423); 18 MONTHS \$26,275

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

QUAIDE, WILLIAM L; SUPPORT OF LUNAR AND PLANETARY INSTITUTE (DPP-8209969*); 12 MONTHS \$34,600

SMITHSONIAN INSTITUTION

LANDRUM, BETTY J; RECORDING OF DATA AND SORTING OF COLLECTIONS FROM POLAR REGIONS (DPP-7413888 A10*); 12 MONTHS \$87,598

LANDRUM, BETTY J; COOPERATIVE SYSTEMATICS AND ANALYSES OF POLAR BIOLOGICAL MATERIALS (DPP-7920835 A02); 12 MONTHS \$99,695

CAIRNS, STEWART D; A SYSTEMATIC ANALYSIS OF THE STYLASTERINA (DEB-8102776*); 6 MONTHS \$5,000

FLORIDA

FLORIDA STATE UNIVERSITY

DEVORE, GEORGE W; CURATORSHIP OF ANTARCTIC CORE COLLECTIONS (DPP-7519723 A06); 12 MONTHS \$128,943

FRIEDMANN, F IMRE; THE ECOLOGY OF ENDOLITHIC MICROORGANISMS IN THE ANTARCTIC DRY VALLEYS (DPP-8017581 A01); 12 MONTHS \$51,958

UNIVERSITY OF SOUTH FLORIDA-MARINE SCIENCE INSTITUTE

VAN VLEET, EDWARD S; LIPID BIOCHEMISTRY OF ANTARCTIC MID-WATER ORGANISMS (DPP-8023961); 12 MONTHS \$40,295

UNIVERSITY OF SOUTH FLORIDA

HOPKINS, THOMAS L; TROPHODYNAMICS OF THE MESOPELAGIC FAUNA IN SOUTHERN OCEAN ECOSYSTEMS (DPP-8107510 A01); 12 MONTHS \$45,635

LAWRENCE, JOHN M; REPRODUCTIVE CHARACTERISTICS OF BROODING AND NON-BROODING ECHINODERMS (DPP-8108992); 12 MONTHS \$19,982

FANNING, KENT A, AND VARGO, GABRIEL A; AN ANTARCTIC PLANKTON AND THE MARINE GEOCHEMISTRY OF RADIUM, GERMANIUM, AND BARIUM (DPP-8214213); 6 MONTHS \$48,870

ILLINOIS

NORTHERN ILLINOIS UNIVERSITY

MCGINNIS, L D; SEISMIC AND GRAVITY STUDIES OF THE UPPER CRUST ALONG THE CENTRAL TRANSANTARCTIC MOUNTAINS (DPP-8015995 A01); 12 MONTHS \$70,000

UNIVERSITY OF ILLINOIS AT URBANA

DEVRIES, ARTHUR L; THE ROLE OF GLYCOPOLYMER ANTIFREEZES IN FREEZING AVOIDANCE OF ANTARCTIC FISHES (DPP-8116917); 12 MONTHS \$98,233

INDIANA

PURDUE UNIVERSITY

LIPSCHUTZ, MICHAEL E; WEATHERING AND CHEMISTRY OF ANTARCTIC METEORITES (DPP-8111513*); 12 MONTHS \$14,500

KANSAS

UNIVERSITY OF KANSAS MAIN CAMPUS

ZELLER, EDWARD J, AND DRESCHHOFF, GISELA A; RESOURCE AND RADIOACTIVITY SURVEY IN ANTARCTICA BY GAMMA RAY SPECTROMETRY (DPP-7721504 A04); 12 MONTHS \$79,278

MAINE

UNIVERSITY OF MAINE, ORONO

DEARBORN, JOHN H; FOODS AND FEEDING HABITS OF ANTARCTIC ASTEROZOAN ECHINODERMS (DPP-7921537 A02); 12 MONTHS \$66,914

KELLOGG, THOMAS B, AND KELLOGG, DAVIDA E; SEDIMENTS DEPOSITED BY MARINE-BASED ICE SHEETS DURING THE LAST GLACIAL MAXIMUM (DPP-8020000 A01*); 12 MONTHS \$44,102

DENTON, GEORGE H; CENOZOIC GLACIAL HISTORY OF THE ANTARCTIC ICE SHEET (DPP-8023714 A01); 12 MONTHS \$95,001

HUGHES, TERENCE J; A PROPOSAL TO MODEL THE STABILITY OF THE WEST ANTARCTIC ICE SHEET (DPP-8107668 A01); 12 MONTHS \$69,324

MARYLAND

UNIVERSITY OF MARYLAND, COLLEGE PARK

ROSENBERG, THEODORE J; INVESTIGATION OF SIGNAL ANOMALIES IN SUBIONOSPHERIC VLF RADIOWAVE PROPAGATION USING DATA FROM U.S. ANTARCTIC STATIONS (DPP-8012941 A01); 12 MONTHS \$16,600

MASSACHUSETTS

MASSACHUSETTS GENERAL HOSPITAL

ZAPOL, WARREN M; DIVING PHYSIOLOGY OF THE FETAL WEDDELL SEAL (DPP-8100212); 9 MONTHS \$24,846

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

SLATER, JOHN G. *TECTONICS OF THE SOUTHERN OCEANS* (DPP-8117402); 12 MONTHS \$119,653

SMITHSONIAN INSTITUTION-ASTROPHYSICAL OBSERVATORY

FIREMAN, EDWARD L. *COMPOSITION AND CARBON-14 CONTENT OF GAS IN ICE AT THE ANTARCTIC METEORITE SITES* (DPP-8025234 A02); 12 MONTHS \$66,450

UNIVERSITY OF MASSACHUSETTS, AMHERST

HUGUENIN, ROBERT L. AND CANALE-PAROLA, ERCOLE. *DISSERTATION RESEARCH ON THE BIOLOGY OF SOIL BACTERIA INDIGENOUS TO ANTARCTIC DRY VALLEYS* (DPP-8120605); 24 MONTHS \$9,000

WOODS HOLE OCEANOGRAPHIC INSTITUTION

DICK, HENRY. *PETROLOGY AND GEOCHEMISTRY OF THE CRUST AND UPPER MANTLE OF THE SOUTH-HERN CIRCUMPOLAR OCEAN BETWEEN 30W AND 30E* (DPP-8019769 A01); 12 MONTHS \$80,116

CORLISS, BRUCE H. *QUATERNARY THERMOHALINE CIRCULATION IN THE SOUTHERN OCEAN* (DPP-8020479 A01); 12 MONTHS \$59,000

MICHIGAN

WAYNE STATE UNIVERSITY

HAMMER, WILLIAM R. AND COSGRIFF, JOHN W. *VERTEBRATE PALEONTOLOGY OF THE PERMIAN-TRIASSIC GONDWANA SEQUENCE IN NORTH VICTORIA LAND, ANTARCTICA* (DPP-8019996 A02); 12 MONTHS \$11,990

MINNESOTA

MACALESTER COLLEGE

WEBERS, GERALD F. *GEOLOGICAL INVESTIGATIONS OF THE ELLSWORTH MOUNTAINS, ANTARCTICA* (DPP-8020482 A01); 12 MONTHS \$34,150

UNIVERSITY OF MINNESOTA

SINIFF, DONALD B. *SEASONAL MOVEMENTS AND INTERACTIONS OF THE WEDDELL SEAL (LEOTONYCHOTES WEDDELLI) AND ANTARCTIC COD (DISSOSTICHUS MAWSONI) IN MCMURDO SOUND, ANTARCTICA* (DPP-8020087 A01); 12 MONTHS \$143,681

UNIVERSITY OF MINNESOTA AT SAINT PAUL

CAHILL, LAURENCE J. *MICROPULSATION RESEARCH AT ROBERVAL, QUEBEC, AND AT SIPLE AND SOUTH POLE, ANTARCTICA* (DPP-8120857); 24 MONTHS \$41,816

NEBRASKA

UNIVERSITY OF NEBRASKA AT LINCOLN

KUIVINEN, KARL C. *COORDINATION OF ICE CORE DRILLING* (DPP-7408414 A14); 12 MONTHS \$343,332

NEW HAMPSHIRE

DEPARTMENT OF ARMY-COLD REGIONS RESEARCH AND ENGINEERING LAB

ACKLEY, STEPHEN F. AND ANDREAS, EDGAR L. *AIR-SEA INTERACTION AND SEA ICE STUDIES OF THE JOINT WEDDELL POLYNIA EXPEDITION* (DPP-8006922 A02); 12 MONTHS \$111,731

UNIVERSITY OF NEW HAMPSHIRE, DURHAM

MAYEWSKI, PAUL A. *HISTORY AND SIGNIFICANCE OF ICE MASS FLUCTUATIONS IN VICTORIA LAND, ANTARCTICA* (DPP-8019982 A01); 12 MONTHS \$21,737

NEW JERSEY

BELL TELEPHONE LABORATORIES

LANZEROTTI, LOUIS J. *MAGNETIC FIELD INVESTIGATIONS AT SIPLE STATION AND SOUTH POLE STATION, ANTARCTICA* (DPP-8120008); 36 MONTHS \$1

ITT ANTARCTIC SERVICES INC

GRAY, RODNEY E. *SPECIALIZED SUPPORT OF THE UNITED STATES ANTARCTIC RESEARCH PROGRAM* (DPP-8003801 A09); \$3,500,000
 GRAY, RODNEY E. *SPECIALIZED SUPPORT OF THE UNITED STATES ANTARCTIC RESEARCH PROGRAM* (DPP-8003801 A11); \$4,413,000
 BROWN, ARTHUR J. *SPECIALIZED SUPPORT OF THE UNITED STATES ANTARCTIC RESEARCH PROGRAM* (DPP-8003801 A12); 6 MONTHS \$858,613

NEW MEXICO

LOS ALAMOS SCIENTIFIC LABORATORY

GUTHALS, PAUL R. MROZ, EUGENE J. AND FOWLER, MALCOLM M. *ANTARCTIC TRACER EXPERIMENT* (DPP-8118562); 35 MONTHS \$18,800

NEW MEXICO INSTITUTE OF MINING AND TECHNOLOGY

KYLE, PHILIP R. *PETROGENESIS OF THE MCMURDO VOLCANIC GROUP AND THE NATURE OF THE SUBCONTINENTAL MANTLE IN VICTORIA LAND, ANTARCTICA* (DPP-8020002 A01); 12 MONTHS \$54,080

KYLE, PHILIP R. *VOLCANIC AND CLIMATIC RECORD OF ANTARCTIC ICE CORES* (DPP-8021402); 12 MONTHS \$66,549

NEW YORK

COLUMBIA UNIVERSITY-LAMONT-DOHERTY GEOLOGICAL OBSERVATORY

DALZIEL, IAN W. *EVOLUTION OF THE WEST ANTARCTIC-ANDEAN-CORDILLERA IN THE SCOTIA ARC REGION* (DPP-7820629 A03); 12 MONTHS \$64,959

GORDON, ARNOLD L. *US-USSR WEDDELL POLYNIA EXPEDITION* (DPP-8005763 A01); 12 MONTHS \$89,649

GORDON, ARNOLD L. *US-USSR WEDDELL POLYNIA EXPEDITION* (DPP-8005763 A02); 6 MONTHS \$24,608

MARRA, JOHN, STEPIEN, JEANNE C. HAYS, JAMES D. MORLEY, JOSEPH J. AND BURCKLE, LLOYD H. *THE WEDDELL SEA POLYNIA IN WINTER - PLANKTON DISTRIBUTION* (DPP-8008011 A02); 12 MONTHS \$90,349

DALZIEL, IAN W. *PENROSE CONFERENCE: THE ANTARCTIC PLATE - A GLOBAL PERSPECTIVE* (DPP-8115101); 6 MONTHS \$3,200

JACOBS, STANLEY S. AND GORDON, ARNOLD L. *ROSS SEA HEAT FLUX EXPERIMENT* (DPP-8115863); 12 MONTHS \$56,000

HAYES, DENNIS E. AND LABRECQUE, JOHN L. *REGIONAL SYNTHESIS OF MARINE GEOLOGICAL AND GEOPHYSICAL DATA OF THE CIRCUM-ANTARCTIC REGION* (DPP-8200239); 12 MONTHS \$105,515

CORNELL UNIVERSITY

KINTNER, PAUL M. *DATA ANALYSIS OF DC AND AC ELECTRIC FIELDS AND MAGNETIC FIELDS IN THE IONOSPHERE ABOVE THE ANTARCTIC VLF TRANSMITTER* (DPP-8023968 A01); 24 MONTHS \$32,574

HUNTER COLLEGE

HASCHEMEYER, AUDREY E. *ADAPTATIONS IN PROTEIN METABOLISM OF ANTARCTIC ORGANISMS* (DPP-8021454 A02); 12 MONTHS \$112,324

STATE UNIVERSITY AT ALBANY

HOGAN, AUSTIN W. *AEROSOL TRANSPORT PROCESSES IN THE ANTARCTIC* (DPP-8115231); 12 MONTHS \$93,947

STATE UNIVERSITY AT BINGHAMTON

MURRISH, DAVID E. *THERMOREGULATORY MECHANISMS IN ANTARCTIC PENGUINS* (DPP-8019988 A01); 12 MONTHS \$43,639

STATE UNIVERSITY AT BUFFALO

LANGWAY, CHESTER C. *OPERATION OF THE CENTRAL ICE CORE STORAGE FACILITY AND INFORMATION EXCHANGE* (DPP-7508512 A08); 12 MONTHS \$13,529

LANGWAY, CHESTER C. *THE GREENLAND ICE SHEET PROGRAM (GISP) ICE CORE STUDIES* (DPP-8117750 A01); \$11,272

NORTH CAROLINA

NORTH CAROLINA STATE UNIVERSITY AT RALEIGH

DEMASTER, DAVID J. AND NITTROUER, CHARLES A. *THE CHRONOMETRY AND GEOCHEMISTRY OF ANTARCTIC SILICEOUS SEDIMENTS* (DPP-8117044); 12 MONTHS \$55,962

UNIVERSITY OF NORTH CAROLINA AT WILMINGTON

GEORGE, ROBERT Y. *GROWTH AND METABOLISM OF ANTARCTIC MARINE CRUSTACEANS IN RELATION TO TEMPERATURE AND PRESSURE* (DPP-8026535 A01); 12 MONTHS \$73,350

GEORGE, ROBERT Y. *A SYMPOSIUM ON THE BIOLOGY ANTARCTIC KRILL, EUPHAUSIA SUPERBA* (DPP-8205855); 12 MONTHS \$22,936

OHIO

KENT STATE UNIVERSITY

DAHL, PETER S. *GROUP TRAVEL FOR U.S. PARTICIPANTS IN THE FOURTH INTERNATIONAL SYMPOSIUM ON ANTARCTIC EARTH SCIENCES IN ADELAIDE, AUSTRALIA, AUGUST 16-20, 1982* (DPP-8200204); 12 MONTHS \$30,020

MIAMI UNIVERSITY CENTRAL OFFICE

GREEN, WILLIAM J. *ASPECTS OF TRACE METAL AND NUTRIENT BEHAVIOR IN THE ONYX RIVER AND IN LAKE VANDA, ANTARCTICA* (DPP-7920860 A01); 12 MONTHS \$15,429

GREEN, WILLIAM J. *TRACE METAL AND NUTRIENT DYNAMICS IN LAKES OF THE ANTARCTIC DRY VALLEYS* (DPP-8117644); 12 MONTHS \$60,754

OHIO STATE UNIVERSITY

WHILLANS, IAN M. *GLACIOLOGY NEAR DOME C, EAST ANTARCTICA* (DPP-7920824 A01); 12 MONTHS \$17,947

MOSLEY-THOMPSON, ELLEN. *MICROPARTICLE ANALYSIS AND GLACIOLOGICAL INTERPRETATION OF THE 500-M ICE CORE, SOUTH POLE, ANTARCTICA* (DPP-8018840 A01); 12 MONTHS \$42,600

ELLIOT, DAVID H. AND JINSMEISTER, WILLIAM J. *GEOLOGIC AND PALEONTOLOGIC HISTORY OF THE JAMES ROSS ISLAND BASIN, NORTHERN ANTARCTIC PENINSULA* (DPP-8020096 A01); 12 MONTHS \$55,000

COLLINSON, JAMES W. *STRATIGRAPHY, SEDIMENTOLOGY AND SEDIMENTARY PETROLOGY OF THE PERMIAN-TRIASSIC GONDWANA SEQUENCE IN NORTH VICTORIA LAND, ANTARCTICA* (DPP-8020088 A01); 12 MONTHS \$19,999

ELLIOT, DAVID H. AND FAURE, GUNTER. *KIRKPATRICK BASALT GROUP ROCKS FROM NORTH VICTORIA LAND, ANTARCTICA* (DPP-8021401 A01); 12 MONTHS \$28,000

OKLAHOMA

OKLAHOMA MEDICAL RESEARCH FOUNDATION

UCHMORE, HAROLD G. *VIRUS SHEDDING AND IMMUNITY DURING ISOLATION IN THE ANTARCTIC* (DPP-8020092 A01); 12 MONTHS \$131,844

OREGON

OREGON GRADUATE CENTER

KHALIL, M A. *ATMOSPHERIC VARIABILITY IN THE CONCENTRATIONS OF TRACE GASES OVER ANTARCTICA* (DPP-8104684); 18 MONTHS \$40,923

OREGON STATE UNIVERSITY

- PILLSBURY, R. D. KOSS SEA HEAT FLUX EXPERIMENT (DPP-8120677); 12 MONTHS \$144,900
 GORDON, LOUIS I. AND NELSON, DAVID M. WINTER NUTRIENT CYCLING IN THE WEDDELL SEA (DPP-8203529); 12 MONTHS \$89,400

PENNSYLVANIA**FRANKLIN INSTITUTE**

- POMERANTZ, MARTIN A. SOLAR SEISMOLOGY AT THE SOUTH POLE STUDIES OF SOLAR OSCILLATIONS (DPP-8119627); 12 MONTHS \$39,195

UNIVERSITY OF PITTSBURGH

- CASSIDY, WILLIAM A. ANTARCTIC SEARCH FOR METEORITES (DPP-7821104 A03); 12 MONTHS \$69,408

RHODE ISLAND**UNIVERSITY OF RHODE ISLAND-GRADUATE SCHOOL OF OCEANOGRAPHY**

- KENNETT, JAMES P. PALEOENVIRONMENTAL EVOLUTION OF THE SOUTHERN OCEAN BASED ON DEEP-DRILLED SEDIMENTARY SEQUENCES (DPP-8112615 A01); 12 MONTHS \$59,200

SOUTH CAROLINA**UNIVERSITY OF SOUTH CAROLINA AT COLUMBIA**

- WILLIAMS, DOUGLAS F. LATE CENOZOIC PALEOCEANOGRAPHIC STUDIES OF SOUTHERN OCEAN DEEP-SEA SEDIMENTS (DPP-8023696 A01); 12 MONTHS \$55,845

SWITZERLAND**UNIVERSITY OF BERN**

- OESCHGER, HANS. GAS ANALYSIS AND ANALYSIS OF RADIOACTIVE ISOTOPES ON ICE CORES FROM SOUTH POLE, ANTARCTICA (DPP-8210926); 12 MONTHS \$74,200

TENNESSEE**UNIVERSITY OF TENNESSEE AT KNOXVILLE**

- SMITH, WALKER O. PHYTOPLANKTON DYNAMICS OF THE ANTARCTIC ICE MELT ZONE (DPP-8119572); 12 MONTHS \$109,996

TEXAS**RICE UNIVERSITY**

- ANDERSON, JOHN B. MARINE GEOLOGY OF THE ANTARCTIC CONTINENTAL MARGIN (DPP-8116623); 12 MONTHS \$68,268

TEXAS A & M UNIVERSITY

- FRYXELL, GRETA A. DISTRIBUTION AND ABUNDANCE OF ANTARCTIC AND SUB-ANTARCTIC PHYTOPLANKTON (DPP-8020381 A01); 12 MONTHS \$44,208

- WORMUTH, JOHN. ANALYSIS OF ANTARCTIC ZOOPLANKTON SAMPLES (DPP-8121358); 12 MONTHS \$25,586

TEXAS TECH UNIVERSITY

- CHATTERJEE, SANKAR. STRATIGRAPHY AND PALEONTOLOGY OF THE GONDWANA ROCKS OF ANTARCTICA (DPP-8107152 A01*); 12 MONTHS \$35,000

UNIVERSITY OF HOUSTON CENTRAL CAMPUS

- BAUST, JOHN C. SYMPOSIUM ON WATER AND ADAPTATION: ARE THERE COMMON DENOMINATORS? HOUSTON, TX. JUNE 27 - JULY 1, 1982 (PCM-8201213*); 6 MONTHS \$1,000

- BERING, EDGAR A. IONOSPHERIC ELECTRIC FIELDS OVER SIPLE STATION, ANTARCTICA DURING THE ROCKET-BALLOON CAMPAIGN OF 1981/1982 (DPP-8207049); 24 MONTHS \$63,000

UTAH**UTAH STATE UNIVERSITY**

- DOUPNIK, JOE R. DIGITAL IONOSONDE STUDIES OF THE IONOSPHERE FROM SIPLE STATION, ANTARCTICA AND ROBERVAL, QUEBEC (DPP-8100220 A01*); 12 MONTHS \$24,818

VIRGINIA**AMERICAN GEOLOGICAL INSTITUTE**

- UNKLESBAY, A. G. TRAVEL OF UNITED STATES SCIENTISTS TO XITH CONGRESS OF INTERNATIONAL ASSOCIATION FOR QUATERNARY RE-

- SEARCH, MOSCOW, USSR, AUGUST 1-9, 1982 (O4R-8206681*); 6 MONTHS \$5,000

BLUE PENCIL GROUP INC

- VARNER, SHERRELL E. EDITORIAL SERVICES FOR THE ANNUAL REVIEW ISSUE OF THE ANTARCTIC JOURNAL OF THE UNITED STATES (DPP-8217792); 12 MONTHS \$11,466

GEOLOGICAL SURVEY

- FORD, ARTHUR B. AND HIMMELBERG, GLEN R. GEOLOGY AND PETROLOGY OF THE DUFEK INTRUSION, ANTARCTICA (DPP-8020753); 12 MONTHS \$35,000

- SOUTHARD, RUPERT B. ANTARCTIC MAPPING OPERATIONS (DPP-8112853 A01); 15 MONTHS \$100,000

- ELSTON, DONALD P. MAGNETOSTRATIGRAPHY AND SEDIMENTOLOGY, DRY VALLEYS AND MCMURDO SOUND (DPP-8120877); 12 MONTHS \$17,000

VIRGINIA POLYTECHNIC INSTITUTE

- PARKER, BRUCE C. AND SIMMONS, GEORGE M. ANTARCTIC LAKE PHYSIOLOGICAL ADAPTATIONS (ALPHA) (DPP-7920805 A02); 12 MONTHS \$106,805

WASHINGTON**BATTELLE MEMORIAL INSTITUTE-BATTELLE NORTHWEST LABORATORIES**

- EVANS, JOHN C. TERRESTRIAL AGES OF ANTARCTIC METEORITES USING 26Al AND 51Mn TECHNIQUES (DPP-8020900); 12 MONTHS \$47,992

- WOGMAN, NEDWIN A. AIR SAMPLING PROGRAM ON USCCC GLACIER (DPP-8215008); 12 MONTHS \$1

UNIVERSITY OF WASHINGTON

- STUIVER, MINZE. OXYGEN ISOTOPE ANALYSIS OF ICE AND PERMAFROST CORES (DPP-8019754 A01); 12 MONTHS \$93,389

- STUIVER, MINZE. ELEVENTH INTERNATIONAL RADIOCARBON CONFERENCE (ATM-8107137*); 12 MONTHS \$6,000

- RAUSCH, ROBERT L. HELMINTH PARASITES OF BIRDS OF THE PALMER ARCHIPELAGO, ANTARCTICA (DPP-8115975); 24 MONTHS \$32,990

- ERICKSON, ALBERT W. CENSUSES OF SEALS IN THE EASTERN SECTOR OF ANTARCTIC PACK ICE (DPP-8210588); 9 MONTHS \$68,444

- HOLZWORTH, ROBERT H. ELECTRODYNAMICS OF THE MIDDLE ATMOSPHERE: SUPERPRESSURE BALLOON PROGRAM (ATM-8212283*); 12 MONTHS \$10,000

WASHINGTON STATE UNIVERSITY

- ROBINSON, ELMER, AND BAMESBERGER, LEE. AIR CHEMISTRY MONITORING AT PALMER STATION (DPP-8005797 A02); 12 MONTHS \$149,690

- ROBINSON, ELMER, AND CRONN, DAGMAR R. AIR CHEMISTRY AND METEOROLOGY IN ANTARCTICA (DPP-8117488); 12 MONTHS \$47,396

WISCONSIN**UNIVERSITY OF WISCONSIN-MADISON-MEDICAL SCHOOL**

- DICK, ELLIOT C. A STUDY OF RESPIRATORY VIRUS TRANSMISSION AMONG THE PERSONNEL AT MCMURDO STATION, ANTARCTIC, DURING THE 'WINGLY' ISOLATION PERIOD (DPP-8015486 A02); 24 MONTHS \$88,875

UNIVERSITY OF WISCONSIN-MADISON

- BENTLEY, CHARLES R. GEOPHYSICAL INVESTIGATION OF THE DOME C AREA, ANTARCTICA (DPP-7820953 A02); 12 MONTHS \$162,032

- STEARNS, CHARLES R. THE COLLECTION AND ANALYSIS OF ANTARCTIC AUTOMATIC WEATHER STATION DATA (DPP-7925043 A03); 12 MONTHS \$197,689

- BENTLEY, CHARLES R. COMPLETION AND PUBLICATION OF ROSS ICE SHELF GEOPHYSICAL AND GLACIOLOGICAL SURVEY FINAL REPORT (DPP-8119989); 12 MONTHS \$51,108

- BENTLEY, CHARLES R. COMPARATIVE ANALYSIS OF AEROMAGNETIC AND MAGSAT DATA OVER ANTARCTICA (DPP-8209484); 12 MONTHS \$25,517

WYOMING**UNIVERSITY OF WYOMING**

- PARISH, THOMAS R. RESEARCH ON SURFACE WINDS OF ANTARCTICA (DPP-8115976); 24 MONTHS \$83,197

SCIENTIFIC AND ENGINEERING PERSONNEL AND EDUCATION & FELLOWSHIPS

SCIENTIFIC AND ENGINEERING PERSONNEL AND EDUCATION

ALABAMA

ALABAMA AGRICULTURAL AND MECHANICAL UNIVERSITY
HENDERSON, WILEY J.; RESEARCH APPRENTICESHIPS FOR MINORITY HIGH SCHOOL STUDENTS (RAMHSS) (SPE-8262042); 15 MONTHS \$48,000

TALLADEGA COLLEGE

BACON, ARTHUR L.; RESEARCH APPRENTICESHIPS FOR MINORITY HIGH SCHOOL STUDENTS (RAMHSS) (SPE-8262024); 15 MONTHS \$26,200

ARIZONA

NORTHERN ARIZONA UNIVERSITY

ALLEN, GARY G.; PRE-COLLEGE TEACHER DEVELOPMENT IN SCIENCE (SPI-8100568 A02); 12 MONTHS \$45,898

UNIVERSITY OF ARIZONA

SHIRER, DONALD L.; COMPUTER-BASED MODULES FOR INTRODUCTORY COURSES IN ELECTRICAL ENGINEERING AND DIGITAL CIRCUITS (SPE-8263181); 36 MONTHS \$500

CALIFORNIA

CALIFORNIA STATE UNIVERSITY, LOS ANGELES

JEFFERSON, MARGARET C.; RESEARCH APPRENTICESHIPS FOR MINORITY HIGH SCHOOL STUDENTS (RAMHSS) (SPE-8262029); 15 MONTHS \$48,000

CALIFORNIA STATE UNIVERSITY, NORTHRIDGE

LANDIS, RAYMOND B.; RESEARCH APPRENTICESHIPS FOR MINORITY HIGH SCHOOL STUDENTS (RAMHSS) (SPE-8262036); 15 MONTHS \$48,000

NORTHROP UNIVERSITY

TEITELL, MURRAY F.; USING COMPUTER GRAPHICS TO IMPROVE ENGINEERING STUDENT'S VISUALIZATION OF MATHEMATICS AND SCIENCE CONCEPTS (SPE-8263130); 36 MONTHS \$36,620

SAN FRANCISCO STATE UNIVERSITY

KURTZ, BARRY; SIMULATION FOR COMPUTER SCIENCE (SPE-8263258); 36 MONTHS \$500

SANTA ANA COLLEGE

DOBOS, DAVID E.; FIELD CENTER FOR NSF CHAUTAUQUA-TYPE SHORT COURSES (SPE-8006032 A03); 12 MONTHS \$20,200

UNIVERSITY OF CALIFORNIA, BERKELEY

SOMERTON, WILBUR H.; A MODEL COMPUTER LABORATORY FOR HIGH SCHOOL MINORITY STUDENTS AND THEIR FACULTIES (SPE-8263207); 36 MONTHS \$15,000

UNIVERSITY OF CALIFORNIA, SANTA CRUZ

PRIMACK, JOEL R.; COMPUTER GAMES FOR TEACHING HIGH SCHOOL AND UNIVERSITY-LEVEL MODERN PHYSICS WITHOUT MATHEMATICS (SPE-8263167); 36 MONTHS \$500

MASSARO, DOMINIC W.; COMPUTER-BASED INSTRUCTION IN EXPERIMENTAL PSYCHOLOGY (SPE-8263262); 36 MONTHS \$500

COLORADO

COLORADO STATE UNIVERSITY

KIRCHNER, THOMAS B.; DEVELOPMENT OF MICROCOMPUTER SOFTWARE FOR TEACHING LIFE SCIENCES SIMULATION MODELING (SPE-8263297); 36 MONTHS \$694

UNIVERSITY OF COLORADO AT BOULDER

CILETTI, MICHAEL D.; MICROGRAPHICS FOR SOPHOMORE CIRCUITS CAD/SIMULATION (SPE-8263165); 36 MONTHS \$20,250

UNIVERSITY OF COLORADO AT DENVER

HARTVIGSON, ZENAS R.; PRE-COLLEGE TEACHER DEVELOPMENT IN SCIENCE (SPI-8101288 A01); 16 MONTHS \$20,914

UNIVERSITY OF DENVER

HUGHES, BARRY B.; DEMOGRAPHIC AND ECONOMIC FORECASTING FOR HIGH SCHOOL STUDENTS (SPE-8262045); 36 MONTHS \$23,816

CONNECTICUT

SACRED HEART UNIVERSITY

SELLS, JEAN; COMPUTER LITERACY FOR UNIVERSITY SCIENCE FACULTY AND STUDENTS: A MODEL PROGRAM (SPE-8263198); 36 MONTHS \$500

DELAWARE

UNIVERSITY OF DELAWARE

HIEBERT, JAMES; CHILDREN'S UNDERSTANDING OF DECIMAL NUMBERS (SPE-8218387); \$60,810

SMITH, DAVID W.; SIMULATED MICROBIOLOGY EXPERIMENTS ON MICROCOMPUTERS (SPE-8263200); 36 MONTHS \$11,975

DISTRICT OF COLUMBIA

AMERICAN ASSOCIATION FOR ADVANCEMENT SCIENCE

DASBACH, JOSEPH M.; NSF CHAUTAUQUA-TYPE SHORT COURSES FOR COLLEGES (SPE-8020958 A04); 12 MONTHS \$88,629

AMERICAN CHEMICAL SOCIETY (ACS)

DANIEL, DAVID; RESEARCH APPRENTICESHIPS FOR MINORITY HIGH SCHOOL STUDENTS (RAMHSS) (SPE-8262028); 15 MONTHS \$40,196

MOORE, JOHN W.; COMPUTER-BASED CHEMISTRY MODULES FOR BUILDING DECISIONMAKING SKILLS IN 10TH GRADE SCIENCE STUDENTS (SPE-8263187); 36 MONTHS \$38,036

CONFERENCE BOARD OF THE MATHEMATICAL SCIENCES

SWARD, MARCIA P.; SPECIAL CBMS MEETING: THE MATHEMATICAL SCIENCES IN K-12: WHAT IS STILL FUNDAMENTAL AND WHAT IS NOT (MST-8218061); 3 MONTHS \$17,000

NATIONAL ACADEMY OF SCIENCES

KELLY, WILLIAM C.; A STUDY OF THE FEDERAL ROLE IN COLLEGE SCIENCE EDUCATION FOR NON-SPECIALISTS (SPE-7912239 A01); \$8,125

NATIONAL SCIENCE TEACHERS ASSOCIATION

YAGER, ROBERT E.; ANALYSIS OF MODEL PROGRAMS IN PRECOLLEGE SCIENCE EDUCATION (MST-8216472); 9 MONTHS \$66,300

SMITHSONIAN INSTITUTION

ADEY, WALTER H.; A LIVING CORAL REEF AS A TOOL FOR PUBLIC EDUCATION IN ECOLOGY (SEC-7806909 A02); 12 MONTHS \$168,357

UNIVERSITY OF DIST OF COLUMBIA CENTRAL OFFICE

SIEGEL, MARK E.; INTRODUCING FACULTY TO SYSTEM DYNAMIC MODELING (SPE-8263087); 36 MONTHS \$500

FLORIDA

FLORIDA AGRICULTURAL AND MECHANICAL UNIVERSITY

EARLY, J. L.; RESEARCH APPRENTICESHIPS FOR MINORITY HIGH SCHOOL STUDENTS (RAMHSS) (SPE-8262058); 15 MONTHS \$36,000

GEORGIA

ATLANTA UNIVERSITY

WEBB, MELVIN R.; RESOURCE CENTER FOR SCIENCE AND ENGINEERING (SPE-7811955 A03); 12 MONTHS \$221,306

WEBB, MELVIN R.; RESEARCH APPRENTICESHIPS FOR MINORITY HIGH SCHOOL STUDENTS (RAMHSS) (SPE-8262044); 15 MONTHS \$48,000

UNIVERSITY OF GEORGIA

ZEITLER, WILLIAM R.; FIELD CENTER FOR NSF CHAUTAUQUA-TYPE SHORT COURSES (SPI-8003644 A03); 12 MONTHS \$12,938

ZEITLER, WILLIAM R.; SUPPORT CENTER FOR NSF CHAUTAUQUA-TYPE SHORT COURSE PROGRAM RFP 80-113 (SPE-8017361 A03); 12 MONTHS \$235,012

HAYES, WILLIS B.; DEVELOPMENT OF INTERACTIVE COMPUTER GRAPHIC MODULES FOR FUNDAMENTAL CONCEPTS IN GEOLOGY (SPE-8263263); 36 MONTHS \$27,492

WEST GEORGIA COLLEGE

GOTT, PRENTICE L.; A MODEL FOR EFFECTIVE MICROCOMPUTER UTILIZATION FOR SCIENCE INSTRUCTION GRADES 10, 11, 12 (SPE-8263281); 36 MONTHS \$500

ILLINOIS

NORTHERN ILLINOIS UNIVERSITY

RIGBY, BRIAN W.; RESEARCH APPRENTICESHIPS FOR MINORITY HIGH SCHOOL STUDENTS (RAMHSS) (SPE-8262060); 15 MONTHS \$36,000

PARKLAND COLLEGE

SCHOEN, DELORES C.; FIELD CENTER FOR NSF CHAUTAUQUA-TYPE SHORT COURSES (SPI-8005655 A04); 12 MONTHS \$11,331

SOUTHERN ILLINOIS UNIVERSITY - CARBONDALE

HALL, MONTE R. AND PURCELL, KAY M.; COMPUTER-ASSISTED, RAPID DATA EVALUATION FOR IMPROVED LABORATORY PROCEDURES IN AN INTRODUCTORY ENGINEERING LABORATORY (SPE-8263078); 36 MONTHS \$500

UNIVERSITY OF ILLINOIS AT CHICAGO CIRCLE

TIEMANN, PHILIP W. AND MARKLE, SUSAN M.; DEVELOPMENT OF COMPUTER-BASED INSTRUCTION TO IMPROVE BASIC PROBLEM-SOLVING SKILLS REQUIRED IN SCIENCE AND ENGINEERING (SPE-8263189); 36 MONTHS \$500

UNIVERSITY OF ILLINOIS AT URBANA

TRAVERS, KENNETH J.; EFFECTS OF TOPIC-SPECIFIC INSTRUCTIONAL VARIABLES IN EIGHTH GRADE MATHEMATICS (SPE-7917893 A02); 12 MONTHS \$39,258

DUGDALE, SHARON; QUALITATIVE INTERPRETATION OF GRAPHS FOR STUDENTS OF BASIC SCIENCES (SPE-8263005); 36 MONTHS \$41,545

INDIANA

INDIANA UNIVERSITY, NORTHWEST

VOTAW, ROBERT B.; RESEARCH APPRENTICESHIPS FOR MINORITY HIGH SCHOOL STUDENTS (RAMHSS) (SPE-8262009); 15 MONTHS \$48,000

PURDUE UNIVERSITY

SADOWSKI, RANDALL P.; ENGINEERING EDUCATION MATERIAL: FOR COMPUTER-AIDED MANUFACTURING (SPE-8020447 A03); 24 MONTHS \$133,651

BIRD, JAMES E.; ALLOY DESIGN AS PRACTICED BY AN INDUSTRIAL METALLURGIST: A COMPUTER SIMULATION FOR INTRODUCTORY MATERIALS SCIENCE STUDENTS (SPE-8263159); 36 MONTHS \$52,044

UNIVERSITY OF NOTRE DAME

MILLER, ALBERT E.; DEVELOPMENT OF AN INTELLIGENT, INTERACTIVE VIDEO DISC SYSTEM FOR INTRODUCTION TO ENGINEERING CONCEPTS (SPE-8263180); 36 MONTHS \$500

IOWA

UNIVERSITY OF IOWA

YAGER, ROBERT E.; FIELD CENTER FOR NSF CHAUTAUQUA-TYPE SHORT COURSES (SPI-8005457 A03); 12 MONTHS \$8,000

UNIVERSITY OF NORTHERN IOWA

FINSAND, D LOUIS; RESEARCH APPRENTICESHIPS FOR MINORITY HIGH SCHOOL STUDENTS (RAMHSS) (SPE-8262012); 15 MONTHS \$42,400

WARD, ROBERT T. AND WEDMAN, JOHN; MICROCOMPUTERS IN SCIENCE TEACHING: COMPUTER-BASED SELF-STUDY MATERIALS FOR TEACHERS (SPE-8263097); 36 MONTHS \$40,072

KANSAS

KANSAS STATE UNIVERSITY

ZOLLMAN, DEAN A.; ANALYSIS OF REAL-WORLD PROBLEMS IN CALCULUS-BASED UNIVERSITY PHYSICS USING A COMPUTER-CONTROLLED VIDEO DISC (SPE-8263019); 36 MONTHS \$56,343

RUSSELL, EUGENE R.; COMPUTER-BASED MODULES FOR ENGINEERING PROBLEM SOLVING IN HIGH SCHOOL PHYSICS (SPE-8263148); 36 MONTHS \$500

UNIVERSITY OF KANSAS MAIN CAMPUS

WILLIAMS, GERRY C.; RESEARCH APPRENTICESHIPS FOR MINORITY HIGH SCHOOL STUDENTS (RAMHSS) (SPE-8262032); 15 MONTHS \$29,000

WICHITA STATE UNIVERSITY

BOWMAN, BARBARA; USING COMPUTER GAMES TO TEACH PHYSICAL PRINCIPLES AND ENGINEERING APPLICATIONS (SPE-8263154); 36 MONTHS \$38,899

KENTUCKY

EASTERN KENTUCKY UNIVERSITY

KUHN, KARL F.; COMPUTER-AIDED PHYSICS LECTURE DEMONSTRATIONS (SPE-8263015); 36 MONTHS \$500

POWELL, HOWARD B.; IMPROVING THE SCIENTIFIC LITERACY OF UNDERGRADUATE STUDENTS THROUGH SIMULATED EXPERIMENTS (SPE-8263050); 36 MONTHS \$500

WESTERN KENTUCKY UNIVERSITY

BEARD, WILLIAM A.; ROBOTICS MODULES FOR ENGINEERING TECHNOLOGY STUDENTS (SPE-8263120); 36 MONTHS \$500

LOUISIANA

LOUISIANA STATE UNIVERSITY, BATON ROUGE

POPLIN, JACK K.; RESEARCH APPRENTICESHIPS FOR MINORITY HIGH SCHOOL STUDENTS (RAMHSS) (SPE-8262033); 15 MONTHS \$35,994

MAINE

UNIVERSITY OF MAINE, ORONO

BEARD, EARL M.; PRE-COLLEGE TEACHER DEVELOPMENT PROGRAM (SPI-8101165 A01); 16 MONTHS \$25,809

MARYLAND

CATONSVILLE COMMUNITY COLLEGE

SAWYER, ROBERT L.; USING THE COMPUTER TO LOWER THE READING LEVEL OF SCIENCE INSTRUCTION FOR THE NON-TRADITIONAL COMMUNITY COLLEGE STUDENT (SPE-8263255); 36 MONTHS \$500

MASSACHUSETTS

CLARK UNIVERSITY

GOULD, HARVEY A.; COMPUTER SIMULATION LABORATORY FOR A SECOND COURSE IN UNIVERSITY-LEVEL PHYSICS (SPE-8263296); 36 MONTHS \$500

EDUCATION DEVELOPMENT CENTER

FINNEY, ROSS L. AND GARFUNKEL, SOLOMON; MODULES AND MONOGRAPHS IN UNDERGRADUATE MATHEMATICS AND ITS APPLICATIONS PROJECT (UMAP) (SED-8007731 A01); 24 MONTHS \$191,750

HAMPSHIRE COLLEGE

WESTING, ARTHUR H.; FIELD CENTER FOR NSF CHAUTAUQUA-TYPE SHORT COURSES (SPI-8005670 A03); 12 MONTHS \$7,047

HARVARD UNIVERSITY

LEWIS, HARRY R.; COMPUTER MODELLING IN SECONDARY SCHOOL PHYSICS EDUCATION (SPE-8263225); 36 MONTHS \$500

SOUTHEASTERN MASSACHUSETTS UNIVERSITY

DOWD, JOHN P.; MICROCOMPUTERS ON-LINE IN THE FRESHMAN PHYSICS LABORATORY (SPE-8263234); 36 MONTHS \$500

WESTFIELD STATE COLLEGE

DUTCH, SUSAN E.; DEVELOPING A PERCEPTION COURSE WITH LAB (SER-8205731); 24 MONTHS \$16,052

MICHIGAN

MICHIGAN STATE UNIVERSITY

SIGNELL, PETER; PROBLEM-ORIENTED PHYSICS INSTRUCTION (SPE-8020272 A01); 12 MONTHS \$150,000

CARLSON, EDWARD H. AND HETHERINGTON, J H.; FRESHMAN PHYSICS COMPUTER LABORATORY (SPE-8263110); 36 MONTHS \$500

MICHIGAN TECHNOLOGICAL UNIVERSITY

MILLMAN, ANN M.; AN INTEGRATED HARDWARE/SOFTWARE APPROACH TO MICROCOMPUTER GRAPHICS IN THE INTRODUCTORY ELECTRICAL ENGINEERING LABORATORY (SPE-8263134); 36 MONTHS \$3,080

WAYNE STATE UNIVERSITY

SINGH, TRILOKHAN; RESEARCH APPRENTICESHIPS FOR MINORITY HIGH SCHOOL STUDENTS (RAMHSS) (SPE-8262008); 15 MONTHS \$24,000

KHASNABIS, SNEHAMAY, AND AKTAN, HALUK M.; A COMPUTER LABORATORY FOR FRESHMAN AND SOPHOMORE-LEVEL CIVIL ENGINEERING EDUCATION (SPE-8263032); 36 MONTHS \$500

MINNESOTA

GUSTAVUS ADOLPHUS COLLEGE

FULLER, RICHARD M.; A PLAN TO MAKE THE MICROCOMPUTER A GENERAL PURPOSE INSTRUMENT FOR UNIVERSITY-LEVEL INTRODUCTORY PHYSICS AND CHEMISTRY LABORATORIES (SPE-8263037); 36 MONTHS \$500

ST OLAF COLLEGE

WALTERS, JOHN P.; COMPUTER AUGMENTATION OF COMPLEX CHEMISTRY LABORATORY SYSTEMS (SPE-8263089); 36 MONTHS \$500

UNIVERSITY OF MINNESOTA

GENNARO, EUGENE D.; OUT OF SCHOOL SCIENCE FOR PRE-ADOLESCENT/ADOLESCENT CHILDREN AND THEIR PARENTS (SPE-8007872 A01); \$24,901

UNIVERSITY OF MINNESOTA AT SAINT PAUL

WELCH, WAYNE W.; SURVEY OF SCIENCE UNDERSTANDING AND ATTITUDES (SED-8022125 A02); 12 MONTHS \$157,826

MISSISSIPPI

MISSISSIPPI STATE UNIVERSITY

HERRING, JOHN W.; RESEARCH APPRENTICESHIPS FOR MINORITY HIGH SCHOOL STUDENTS (RAMHSS) (SPE-8262063); 15 MONTHS \$21,200

UNIVERSITY OF SOUTHERN MISSISSIPPI

DUNIGAN, NANCY C.; PRE-COLLEGE TEACHER DEVELOPMENT PROGRAM (SPI-8100939 A01); 16 MONTHS \$39,829

MISSOURI

SOUTHWEST MISSOURI STATE UNIVERSITY

CORCORAN, WILLIAM T.; TORNADO WARNING EDUCATION FOR HIGH SCHOOL- AND UNIVERSITY-LEVEL STUDENTS USING A MICROCOMPUTER (SPE-8263317); 36 MONTHS \$500

NEW JERSEY

NEW JERSEY INSTITUTE OF TECHNOLOGY

DEUTSCHMAN, HAROLD D; RESEARCH APPRENTICESHIPS FOR MINORITY HIGH SCHOOL STUDENTS (RAMHSS) (SPE-8262004); 15 MONTHS \$19,800

GROW, JAMES M; DEVELOPMENT OF CLASSROOM VISUAL AIDS USING MICROCOMPUTER GRAPHICS FOR CHEMICAL ENGINEERING (SPE-8263286); 36 MONTHS \$34,938

NEW MEXICO

UNIVERSITY OF NEW MEXICO

GRIEGO, RICHARD J; RESEARCH APPRENTICESHIPS FOR MINORITY HIGH SCHOOL STUDENTS (RAMHSS) (SPE-8263003); 15 MONTHS \$48,000

NEW YORK

CHILDREN'S TELEVISION WORKSHOP

MIELKE, KEITH W; 3-2-1 CONTACT-A CHILDREN'S TELEVISION SERIES ABOUT SCIENCE AND TECHNOLOGY (15S-8024090 A03); 12 MONTHS \$930,000

CITY COLLEGE

ERLBACH, ERICH; RESEARCH APPRENTICESHIPS FOR MINORITY HIGH SCHOOL STUDENTS (RAMHSS) (SPE-8262018); 15 MONTHS \$33,920

COLLEGE AT BROCKPORT

HUBBARD, JOHN E; GROUNDWATER POLLUTION: MICROCOMPUTER LEARNING MODULES FOR PRE-COLLEGE AND UNIVERSITY-LEVEL STUDENTS (SPE-8263305); 36 MONTHS \$500

HEALTH RESEARCH INC.-ROSSELL PARK DIVISION

MIRAND, EDWIN A; RESEARCH APPRENTICESHIPS FOR MINORITY HIGH SCHOOL STUDENTS (RAMHSS) (SPE-8262047); 15 MONTHS \$21,200

ITHACA COLLEGE

SMITH, PAULAN A; INTEGRATING COMPUTERS INTO THE HIGH SCHOOL AND UNIVERSITY SCIENCE LAB (SPE-8263273); 36 MONTHS \$42,378

NEW YORK ZOOLOGICAL SOCIETY

BERKOVITS, ANNETTE; WILDLIFE INQUIRY THROUGH ZOO EDUCATION (WIZE) (SED-8020410 A01); 24 MONTHS \$181,919

POLYTECHNIC INSTITUTE OF NEW YORK

BULKIN, BERNARD J; FIELD CENTER FOR NSF CHAUTAUQUA-TYPE SHORT COURSES (SPI-8005657 A03); 12 MONTHS \$26,742

PETERSON, NORMAN C; MICROPROCESSOR SIMULATION OF LABORATORY INSTRUMENTS FOR SECONDARY AND UNIVERSITY LEVEL TEACHING (SPE-8263088); 36 MONTHS \$35,000

STATE UNIVERSITY AT BUFFALO

KOSMAN, DANIEL J; THE INTEGRATED USE OF A MICROCOMPUTER SYSTEM IN A BIOCHEMISTRY TEACHING LABORATORY (SPE-8263302); 36 MONTHS \$50,471

UNIVERSITY OF ROCHESTER

SHARPLESS, STEWART L; MICROCOMPUTERS IN ASTRONOMY LABS (SPE-8263211); 36 MONTHS \$500

NORTH CAROLINA

GUILFORD TECHNICAL INSTITUTE

BLOOM, THOMAS K; MODULES IN PHYSICS AND INDUSTRIAL ENGINEERING FOR SECONDARY SCHOOLS AND COMMUNITY COLLEGES (SPE-8263294); 36 MONTHS \$500

WESTERN CAROLINA UNIVERSITY

MARTIN, CHARLES J; PILOT PROJECT TO INITIATE IMPLEMENTATION OF ADVANCED PLACEMENT COMPUTER SCIENCE IN HIGH SCHOOLS (SPE-8263111); 36 MONTHS \$1,600

NORTH DAKOTA

NORTH DAKOTA STATE UNIVERSITY CENTRAL OFFICE

CHONG, PHILIP S; DEVELOPING A PROTOTYPE DECISION SUPPORT SYSTEM FOR CLASSROOM USE IN INTRODUCTORY INDUSTRIAL ENGINEERING COURSES (SPE-8263255); 36 MONTHS \$500

OHIO

CASE WESTERN RESERVE UNIVERSITY

BOULDING, MARGARET E; RESEARCH APPRENTICESHIPS FOR MINORITY HIGH SCHOOL STUDENTS (RAMHSS) (SPE-8262037); 15 MONTHS \$47,996

UNIVERSITY OF DAYTON

MINER, GEORGE K; FIELD CENTER FOR NSF CHAUTAUQUA-TYPE SHORT COURSES (SPI-8005649 A03); 12 MONTHS \$9,704

JONES, EUGENE E; RESEARCH APPRENTICESHIPS FOR MINORITY HIGH SCHOOL STUDENTS (RAMHSS) (SPE-8262034); 15 MONTHS \$48,000

UNIVERSITY OF TOLEDO

SCHAFF, JOHN F; RESEARCH APPRENTICESHIPS FOR MINORITY HIGH SCHOOL STUDENTS (RAMHSS) (SPE-8262010); 15 MONTHS \$24,000

OKLAHOMA

UNIVERSITY OF OKLAHOMA NORMAN CAMPUS

ANDREE, RICHARD V; A MODEL STATE-WIDE EDUCATIONAL COMPUTER CENTER (SPE-8263135); 36 MONTHS \$29,000

OREGON

MATI LEARNING CENTER

MAIER, EUGENE A; PRE-COLLEGE TEACHER DEVELOPMENT IN SCIENCE (SPI-8101607 A01); 24 MONTHS \$90,377

OREGON GRADUATE CENTER

EROR, NICHOLAS G; FIELD CENTER FOR NSF CHAUTAUQUA-TYPE SHORT COURSES (SPI-8006026 A03); 12 MONTHS \$24,797

PENNSYLVANIA

CARNEGIE-MELLON UNIVERSITY

LARKIN, JILL H; MATHEMATICAL REPRESENTATIONS OF REAL-WORLD KNOWLEDGE: PHYSICS AND WORD PROBLEMS (SED-8018264 A01); 24 MONTHS \$305,151

REHAK, DANIEL R; A PERSONAL COMPUTING ENVIRONMENT FOR CIVIL ENGINEERING EDUCATION (SPE-8263002); 36 MONTHS \$56,237

PENNSYLVANIA STATE UNIVERSITY

MC KINSTRY, HERBERT A; MICROCOMPUTER GRAPHICS FOR MATERIALS SCIENCES EDUCATION (SPE-8263080); 36 MONTHS \$500

HUGGINS, DAVID L, AND MYERS, ROY E; COMPUTER ASSISTED DESIGN PROJECT FOR INTRODUCTORY ENGINEERING STUDENTS (SPE-8263098); 36 MONTHS \$500

COHEN, PAUL H; USE OF MICROCOMPUTERS FOR COMPUTER-ASSISTED MANUFACTURING EDUCATION (SPE-8263146); 36 MONTHS \$16,819

PHILADELPHIA REG INTRO FOR MINORITIES IN ENGRG

MCLAUGHLIN, W B; RESEARCH APPRENTICESHIPS FOR MINORITY HIGH SCHOOL STUDENTS (RAMHSS) (SPE-8262001); 15 MONTHS \$28,600

TEMPLE UNIVERSITY

MULDOWER, LEONARD; FIELD CENTER FOR NSF CHAUTAUQUA-TYPE SHORT COURSES (SPI-8005658 A03); 12 MONTHS \$22,058

UNIVERSITY OF PITTSBURGH

MICKLE, MARLIN H; AN ELECTRICAL ENGINEERING MICROPROCESSOR LABORATORY FACILITY FOR MULTIPLE REMOTE STUDENT ACCESS (SPE-8263271); 36 MONTHS \$760

PUERTO RICO

PONCE SCHOOL OF MEDICINE

GONZALEZ-LIMA, FRANCISCO; RESEARCH APPRENTICESHIPS FOR MINORITY HIGH SCHOOL STUDENTS (RAMHSS) (SPE-8262061); 15 MONTHS \$27,120

SOUTH CAROLINA

COLLEGE OF CHARLESTON

DUKES, ROBERT J; RESEARCH APPRENTICESHIPS FOR MINORITY HIGH SCHOOL STUDENTS (RAMHSS) (SPE-8262022); 15 MONTHS \$28,800

DUKES, ROBERT J; COMPUTER SIMULATIONS OF THE RESEARCH PROCESS IN ASTRONOMY FOR USE IN INTRODUCTORY ASTRONOMY LABORATORIES (SPE-8263018); 36 MONTHS \$41,724

TENNESSEE

CHRISTIAN BROTHERS COLLEGE

DOODY, JOHN E; FIELD CENTER FOR NSF CHAUTAUQUA-TYPE SHORT COURSES (SPI-8005668 A03); 12 MONTHS \$14,422

TENNESSEE VALLEY CTR MING HITY ECON DEVELOP INC

TAYLOR, COMER; RESEARCH APPRENTICESHIPS FOR MINORITY HIGH SCHOOL STUDENTS (RAMHSS) (SPE-8262014); 12 MONTHS \$24,000

UNIVERSITY OF TENNESSEE AT KNOXVILLE

CLARK, EDWARD S; A MODEL FOR INTRODUCING COMPUTERS INTO CHEMICAL ENGINEERING (SPE-8263269); 36 MONTHS \$500

TEXAS

BAYLOR COLLEGE OF MEDICINE

THOMSON, WILLIAM A; RESEARCH APPRENTICESHIPS FOR MINORITY HIGH SCHOOL STUDENTS (RAMHSS) (SPE-8262016); 15 MONTHS \$48,000

TEXAS A & M UNIVERSITY

PATTERSON, C O; COMPUTER-BASED INSTRUCTION FOR UNIVERSITY GENERAL (INTRODUCTORY) BIOLOGY LABORATORIES (SPE-8263113); 36 MONTHS \$43,033

UNIV OF TEXAS AT AUSTIN

BARUFALDI, JAMES P; FIELD CENTER FOR NSF CHAUTAUQUA-TYPE SHORT COURSES (SPI-8005649 A03); 12 MONTHS \$18,895

UNIVERSITY OF HOUSTON CENTRAL CAMPUS

JAMESON, DAVID L; PROBLEM SOLVING EXERCISES IN UNDERGRADUATE GENERAL BIOLOGY (SPE-8263072); 36 MONTHS \$500

JONES, HOWARD L; HIGH SCHOOL PHYSICS MODULES FOR THE CLASSROOM MICROCOMPUTER (SPE-8263209); 36 MONTHS \$58,300

UTAH

UNIVERSITY OF UTAH

DAVIS, E ALLAN; FIELD CENTER FOR NSF CHAUTAUQUA-TYPE SHORT COURSES (SPI-8006035 A03); 12 MONTHS \$19,214

VIRGINIA

KAPPA SYSTEMS INC

ALDRIDGE, JANIS; *PROVIDING SUPPORT SERVICES REQUIRED BY THE COMMISSION ON PRECOLLEGE EDUCATION IN MATHEMATICS, SCIENCE AND TECHNOLOGY* (MST-8219377*); 19 MONTHS \$75,000

UNIVERSITY OF VIRGINIA

GIBSON, JOHN E; *COMPUTER AIDED DESIGN AND MANUFACTURING CONSORTIUM FOR ENGINEERING EDUCATION* (SPE-8019647 A07); 24 MONTHS \$400,000

WASHINGTON

EASTERN WASHINGTON UNIVERSITY

PEREZ, JAMES; *RESEARCH APPRENTICESHIPS FOR MINORITY HIGH SCHOOL STUDENTS* (RAMHSS) (SPE-8262062); 15 MONTHS \$25,440

EVERGREEN STATE COLLEGE

GILMOUR, JOSEPH E; *INTERGOVERNMENT PERSONNEL ACT MOBILITY ASSIGNMENT* (MST-8215840); 17 MONTHS \$20,000

WASHINGTON STATE UNIVERSITY

ROSS, ROCKFORD J; *A DYNAMIC LIBRARY OF PASCAL PROGRAMMING LANGUAGE EXAMPLES* (SPE-8263156); 36 MONTHS \$24,042

WISCONSIN

MILWAUKEE PUBLIC MUSEUM

WEST, ROBERT M; *MUSEUM EXHIBIT ON THE EARTH'S STRUCTURE AND HISTORY* (SEC-8006393 A02); 12 MONTHS \$88,000

UNIVERSITY OF WISCONSIN-SUPERIOR

VAISHNAV, DINESH D; *RESEARCH APPRENTICESHIPS FOR MINORITY HIGH SCHOOL STUDENTS* (RAMHSS) (SPE-8262038); 15 MONTHS \$47,983

FELLOWSHIPS

DISTRICT OF COLUMBIA

NATIONAL ACADEMY OF SCIENCES

HANSING, FRANK D; *NSF MINORITY GRADUATE FELLOWSHIP PROGRAM* (SPI-8165513 A01); 2 MONTHS \$4,250

NEW YORK

TEACHERS COLLEGE

NONE, NONE N; *SUPPORT FOR NSF MINORITY GRADUATE FELLOWS* (SPI-8205556); 60 MONTHS \$8,200

SPECIAL FOREIGN CURRENCY

SCIENTIFIC & TECHNOLOGICAL INFORMATION

INDIA

AMERIND PUBLISHING COMPANY LTD

PRIMLANI, MOHAN; SFC AWARD (INDIAN CURRENCY) TO TRANSLATE FOREIGN SCIENTIFIC AND TECHNICAL LITERATURE INTO ENGLISH (26T-7104528 A31); 12 MONTHS \$75,000

PAKISTAN

MESSRS SAAD PUBLICATIONS

SAAD, GETI; SPECIAL FOREIGN CURRENCY AWARD (IN PAKISTANI RUPEES) TO TRANSLATE FOREIGN SCIENTIFIC AND TECHNICAL LITERATURE INTO ENGLISH (INT-6700207 A34); 21 MONTHS \$25,000

SCIENTIFIC RESEARCH

CALIFORNIA

UNIVERSITY OF CALIFORNIA, SAN DIEGO-SCRIPPS INSTITUTION OF OCEANOGRAPHY

MACDOUGALL, J DOUGLAS, AND GOPALAN, K; SFC AWARD (INDIAN CURRENCY) FOR ISOTOPIC AND CHEMICAL STUDIES OF THE DECCAN PLATEAU (INT-8105600 A01); 12 MONTHS \$10,308

UNIVERSITY OF CALIFORNIA, SAN FRANCISCO

PAWSON, IVAN G; SECULAR TREND AND GROWTH RATES IN A MODERNIZING HIGH ALTITUDE POPULATION (BNS-8118841*); 12 MONTHS \$10,777

PAWSON, IVAN G; SECULAR TREND AND GROWTH RATES IN A MODERNIZING HIGH ALTITUDE POPULATION (BNS-8118841 A01); \$2,400

UNIVERSITY OF CALIFORNIA, SANTA CRUZ

TOBISCH, OTHMAR T; SFC AWARD (INDIAN CURRENCY) FOR STUDY OF STRUCTURAL EVOLUTION OF THE INDUS SUTURE ZONE NEAR LAMAYURU, LADAKA, NORTHWESTERN HIMALAYA (INT-8307389); 12 MONTHS \$18,250

COLORADO

NATIONAL CENTER FOR ATMOSPHERIC RESEARCH

WHITE, ROBERT M; OPERATION, MAINTENANCE AND MANAGEMENT OF THE NATIONAL CENTER FOR ATMOSPHERIC RESEARCH AND THE NATIONAL SCIENTIFIC BALLOON FACILITY (ATM-773757 AA2*); 12 MONTHS \$100,625

CICERONE, RALPH J; SFC AWARD (INDIAN CURRENCY & U.S. DOLLARS) TO SUPPORT U.S. SCIENTISTS IN THE INDO-U.S. WORKSHOP ON GLOBAL OZONE PROBLEMS & POSSIBLE EFFECTS; NEW DELHI, INDIA; JAN 1983 (INT-773757 AB2*); 12 MONTHS \$81,060

DISTRICT OF COLUMBIA

ASSOCIATED UNIVERSITIES INC

HOLLAENDER, ALEXANDER; SFC AWARD (PAKISTANI AND U.S. CURRENCY) FOR A TRAINING COURSE & WORKSHOP ON ENVIRONMENTAL MUTAGENESIS AND CARCINOGENESIS, ISLAMABAD, PAKISTAN, OCT. - NOV. 1982 (INT-8310983*); 12 MONTHS \$32,600

DEPARTMENT OF STATE

BANYAS, JOSEPH G; FOREIGN AFFAIRS ADMINISTRATIVE SUPPORT (FAAS) AND DISTRIBUTED ADMINISTRATIVE SUPPORT (DAS) EXPENSES (13T-8312979); 12 MONTHS \$13,308

GEORGE WASHINGTON UNIVERSITY

MAHMOOD, KHALID, AND TARAR, RIAZ N; SFC AWARD (PAKISTAN CURRENCY & U.S. DOLLARS) FOR PROTOTYPE RESEARCH ON ALLUVIAL CHANNELS IN IRRIGATION CANALS AND MEDIUM SIZE RIVERS (INT-8009474 A08*); \$121,212

GEORGETOWN UNIVERSITY

MARTIRE, DANIEL E; SFC AWARD (INDIAN CURRENCY AND U.S. DOLLARS) ON THE MOLECULAR STRUCTURE AND THERMODYNAMIC PROPERTIES OF ALKANES AND POLYMERS AS A FUNCTION OF TEMPERATURE AND PRESSURE (INT-8304395*); 36 MONTHS \$41,940

HOWARD UNIVERSITY

SABNIS, GAJANAN M; SFC AWARD (IN INDIAN CURRENCY AND U.S. DOLLARS) TO SUPPORT U.S. SCIENTISTS AT THE WORLD CONFERENCE ON REHABILITATION OF BUILDINGS AND BRIDGES; BOMBAY, INDIA; DECEMBER 1981 (INT-8111905*); 12 MONTHS \$49,000

EGYPT

DEPARTMENT OF STATE-AMERICAN EMBASSY - CAIRO

VREBALOVICH, THOMAS, AND BELLINGER, EARL; ADMINISTRATIVE AND TECHNICAL MANAGEMENT OF NSF PROGRAM ACTIVITIES WITHIN EGYPT (INT-8214903); 36 MONTHS \$160,000

FLORIDA

FLORIDA STATE UNIVERSITY

BASU, DEBABRATA; SFC AWARD (IN INDIAN CURRENCY) FOR RESEARCH AND STUDIES BY A U.S. GUEST SCIENTIST AT THE INDIAN STATISTICAL INSTITUTE, CALCUTTA, INDIA (INT-8307388); 12 MONTHS \$20,857

UNIVERSITY OF MIAMI

VEZIROGLU, T NEJAT; SFC AWARD (PAKISTAN CURRENCY AND U.S. DOLLARS) FOR U.S.PAKISTAN SYMPOSIUM-WORKSHOP ON RENEWABLE ENERGY SOURCES; MARCH 1982; LAHORE, PAKISTAN (INT-8213235*); 12 MONTHS \$82,260

ILLINOIS

AMERICAN INSTITUTE OF INDIAN STUDIES

DIMOCK, EDWARD C; SFC AWARD (INDIAN CURRENCY AND U.S. DOLLARS) FOR RESEARCH SUPPORT OF U.S. SCIENTISTS WORKING IN INDIA (INT-8016982 A02*); 12 MONTHS \$228,083

SOUTHERN ILLINOIS UNIVERSITY - CARBONDALE

CORRUCCINI, ROBERT S; OCCLUSAL EPIDEMIOLOGICAL TRANSITION IN POPULATIONS OF NORTH INDIA (BNS-8119875*); 24 MONTHS \$11,998

UNIVERSITY OF ILLINOIS AT CHICAGO CIRCLE

HARTNETT, JAMES P, AND SHAH, RAMESH K; SFC AWARD (INDIAN CURRENCY AND U.S. DOLLARS) FOR SUPPORT OF U.S. DELEGATION FOR A U.S. INDO BINATIONAL WORKSHOP ON HEAT TRANSFER OF ENGINEERING (INT-8113154*); 12 MONTHS \$28,680

UNIVERSITY OF ILLINOIS AT URBANA

LIU, CHAO H, AND YEH, K C; STUDIES OF SCINTILLATION PHENOMENA IN THE IONOSPHERE (ATM-8208931*); 12 MONTHS \$2,900

INDIA

INDIAN INSTITUTE OF TECHNOLOGY, BOMBAY

SUBBARAO, K V; SFC AWARD (IN INDIAN CURRENCY) TO ESTABLISH THE FLOW BY FLOW STRATIGRAPHY OF A PART OF THE DECCAN BASALT PROVINCE, INDIA, AND DEVELOP CONSTRAINTS ON ITS PETROGENESIS (INT-8311834); 36 MONTHS \$39,414

INDIAN INSTITUTE OF TECHNOLOGY, NEW DELHI

MISRA, ASHOK; SFC AWARD (INDIAN CURRENCY) FOR DEVELOPMENT AND STRUCTUREPROPERTY CHARACTERIZATION OF POLYESTERS AND COPOLYESTERS (INT-8109005); 36 MONTHS \$55,675

JAWAHARLAL NEHRU UNIVERSITY

RAJAMANI, V; SFC AWARD (INDIAN CURRENCY) FOR RESEARCH ON PETROGENESIS AND ORE GENESIS OF THE ARCHEAN KOLAR SCHIST BELT, KARNATAKA, INDIA (INT-8305537); 36 MONTHS \$76,071

NATIONAL GEOPHYSICAL RESEARCH INSTITUTE

NAGVI, S M, AND ROGERS, JOHN J; SFC AWARD (INDIAN CURRENCY) FOR SUPPORT OF A WORKSHOP ON PRECAMBRIAN OF SOUTH INDIA; JANUARY 1982; IN HYDERABAD, INDIA (INT-8116345); 12 MONTHS \$26,391

RAMAN RESEARCH INSTITUTE

CHANDRASEKHAR, S, AND MARTIRE, DANIEL E; SFC AWARD (INDIAN CURRENCY) ON THE MOLECULAR STRUCTURE AND THERMODYNAMIC PROPERTIES OF ALKANES AND POLYMERS AS A FUNCTION OF TEMPERATURE AND PRESSURE (INT-8307304); 36 MONTHS \$102,660

INDIANA

PURDUE UNIVERSITY

RAMKRISHNA, DORAISWAM; SPECIAL FOREIGN CURRENCY AWARD (IN INDIAN CURRENCY) FOR U.S. GUEST SCIENTIST RESEARCH ON FLUIDIZED BED REACTORS AT THE INDIAN INSTITUTE OF SCIENCE, BANGALORE (INT-8306444); 12 MONTHS \$28,710

KANSAS

UNIVERSITY OF KANSAS MAIN CAMPUS

BAUMGARTEL, HOWARD; SFC AWARD (INDIAN CURRENCY) FOR A GUEST SCIENTIST TO STUDY MANAGEMENT DEVELOPMENT AND TECHNOLOGICAL INNOVATION (INT-8018161 A01); 12 MONTHS \$550

MAINE

UNIVERSITY OF MAINE, ORONO

BORNS, HAROLD W. SFC AWARD (INDIAN AND U.S. CURRENCY) FOR STUDY OF GLACIOMARINE SEDIMENTATION AND GONDWANA PALEOENVIRONMENTS AND STRATIGRAPHY IN EAST CENTRAL INDIA (INT-8205665*); 30 MONTHS \$80,700

MARYLAND

UNIVERSITY OF MARYLAND, COLLEGE PARK

HOLMGREN, HARRY D. SFC AWARD (IN INDIAN CURRENCY) FOR A UNITED STATES-INDIA BINATIONAL WORKSHOP AND SYMPOSIUM ON NUCLEAR PHYSICS AT CYCLOTRON AND INTERMEDIATE ENERGIES, MAY 24-JUNE 6, 1982 (INT-8121035*); 12 MONTHS \$58,605

MASSACHUSETTS

HARVARD UNIVERSITY

PILBEAM, DAVID R. ORIGINS OF HOMINIDAE (BNS-8140818 A01*); \$10,630

UNIVERSITY OF MASSACHUSETTS, AMHERST

STEIN, RICHARD S. AND MISRA, ASHOK. SFC AWARD (INDIAN AND U.S. CURRENCY) FOR DEVELOPMENT AND STRUCTURE-PROPERTY CHARACTERIZATION OF POLYESTERS AND COPOLYESTERS (INT-8207859*); 36 MONTHS \$11,695

WOODS HOLE OCEANOGRAPHIC INSTITUTION

MILLIMAN, JOHN D. SFC AWARD (PAKISTANI CURRENCY AND U.S. DOLLARS) FOR A U.S.-PAKISTAN WORKSHOP ON MARINE SCIENCES, KARACHI, NOVEMBER 1982 (INT-8210182*); 12 MONTHS \$80,356

MICHIGAN

UNIVERSITY OF MICHIGAN-ANN ARBOR

MURTY, KATTA G. SFC AWARD (INDIAN CURRENCY) FOR A U.S. GUEST SCIENTIST AT THE INDIAN STATISTICAL INSTITUTE, NEW DELHI, INDIA; JANUARY 1982 (INT-8109825*); 12 MONTHS \$11,020

SCHORGER, WILLIAM D. AND EDWARDS, DAVID B. DOCTORAL DISSERTATION RESEARCH IN ANTHROPOLOGY (BNS-8206246*); 18 MONTHS \$3,000

MONTANA

MONTANA STATE UNIVERSITY

KEIGHTLEY, W. O. SFC AWARD (INDIAN CURRENCY) FOR A GUEST SCIENTIST AT THE EARTHQUAKE ENGINEERING DEPARTMENT, ROORKEE UNIVERSITY, INDIA (INT-8201581*); 12 MONTHS \$63,100

NEW HAMPSHIRE

UNIVERSITY OF NEW HAMPSHIRE, DURHAM

MAYEWSKI, PAUL A. AND LYONS, W. BERRY. SFC AWARD (INDIAN CURRENCY AND U.S. DOLLARS) FOR STUDY OF PALEOCLIMATIC RECONSTRUCTION ALONG THE MONSOON-ARID TRANSITION ZONE - INDIAN HIMALAYAS (INT-8203891*); 12 MONTHS \$76,950

NEW YORK

ASIA SOCIETY

TANEN, TED M. SFC AWARD (IN INDIAN CURRENCY AND U.S. DOLLARS) FOR THE EXCHANGE AND COLLABORATION OF INDIAN AND AMERICAN RESEARCH SCHOLARS IN THE NATURAL AND SOCIAL SCIENCES (INT-8201902*); 24 MONTHS \$401,670

BROOKLYN COLLEGE

BHATTACHARJI, SOMDEV. SFC AWARD (INDIAN AND U.S. CURRENCY) FOR A BINATIONAL WORKSHOP ON THE EVOLUTION AND ECONOMIC POTENTIAL OF THE CUDDAPAH BASIN, SOUTH INDIA (INT-8116808*); 12 MONTHS \$25,997

STATE UNIVERSITY AT STONY BROOK

HANSON, GILBERT N. SFC AWARD (INDIAN CURRENCY AND U.S. DOLLARS) FOR RESEARCH ON PETROGENESIS AND ORE GENESIS OF THE ARCHEAN KOLAR SCHIST BELT, KARNATAKA, INDIA (INT-8205525*); 36 MONTHS \$13,143

NORTH CAROLINA

UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL

ROGERS, JOHN J. PRECAMBRIAN OF SOUTH INDIA (EAR-7905723 A04*); \$9,600

MCMAHAN, ELIZABETH A. SFC AWARD (INDIAN CURRENCY) FOR RESEARCH ON THE ROLE OF JOB ALLOCATION BY AGE IN THE INTEGRATION OF THE TERMITE COLONY (INT-8109028*); 12 MONTHS \$11,988

OHIO

OHIO UNIVERSITY

CAVENDER, JAMES C. SFC AWARD (IN INDIAN CURRENCY) FOR GUEST SCIENTIST TO HIMACHAL PRADESH UNIVERSITY TO WORK ON CELLULAR SLIMES MOLDS OF THE HIMALAYAS (INT-8119011*); 12 MONTHS \$6,200

UNIVERSITY OF CINCINNATI

DE JONG, KEES A. AND FARAH, ABUL. SFC AWARD (PAKISTANI CURRENCY AND U.S. DOLLARS) FOR STUDY OF GEODYNAMICS OF PAKISTAN - SUPPLEMENT (INT-8013158 A01*); 12 MONTHS \$24,242

OREGON

OREGON STATE UNIVERSITY

LAWRENCE, ROBERT D. AND YEATS, ROBERT S. SFC AWARD (PAKISTANI CURRENCY AND U.S. DOLLARS) FOR STUDY OF THE TECTONICS OF NORTHERN PAKISTAN (GEODYNAMICS OF PAKISTAN PROJECT) (INT-8118403*); 36 MONTHS \$472,848

PAKISTAN

NATIONAL INSTITUTE OF OCEANOGRAPHY

QURAISSHEE, G. S. AND MILLIMAN, JOHN D. SFC AWARD (PAKISTANI CURRENCY) FOR A U.S. - PAKISTAN WORKSHOP ON MARINE SCIENCES, KARACHI, NOVEMBER 1982 (INT-8217426*); 12 MONTHS \$8,100

PAKISTAN AGRICULTURAL RESEARCH COUNCIL

BALACH, UMAR K. SFC AWARD (IN PAKISTANI CURRENCY) FOR A TRAINING COURSE AND WORKSHOP ON ENVIRONMENTAL MUTAGENESIS AND CARCINOGENESIS, ISLAMABAD, PAKISTAN, OCT.-NOV. 1982 (INT-8214148*); 12 MONTHS \$60,500

PAKISTAN CNCL OF SCIENTIFIC & INDUSTRIAL LAB

HUSSAIN, S. F. AND SHAMMA, MAURICE. SFC AWARD (PAKISTANI CURRENCY) FOR STUDIES ON NEW ISOQUINOLINE ALKALOIDS (INT-8209796*); 36 MONTHS \$25,000

PENNSYLVANIA

PENNSYLVANIA STATE UNIVERSITY

SHAMMA, MAURICE. SFC AWARD (PAKISTANI CURRENCY AND U.S. DOLLARS) FOR STUDIES ON NEW ISOQUINOLINE ALKALOIDS (INT-8209537*); 36 MONTHS \$4,196

SOUTH CAROLINA

UNIVERSITY OF SOUTH CAROLINA AT COLUMBIA

MCORE, WILLARD S. SFC AWARD (INDIAN CURRENCY) FOR GUEST SCIENTIST IN GEOCHEMICAL STUDIES OF THE GANGES AND BRAHMAPUTRA RIVERS (INT-8117218*); 12 MONTHS \$2,710

TEXAS

TEXAS TECH UNIVERSITY

CHATTERJEE, SANKAR. STRATIGRAPHY AND PALEONTOLOGY OF THE GONDWANA ROCKS OF ANTARCTICA (DPP-8107152 A01*); 12 MONTHS \$2,000

UNIV OF TEXAS AT DALLAS

COLLINS, CARL B. SFC AWARD (INDIAN CURRENCY) FOR SUPPORT OF U.S. PART IN AN INDO-U.S. COOPERATIVE PROJECT IN LASER PHOTO-LYSIS (INT-8116728*); 36 MONTHS \$35,573

WASHINGTON

WASHINGTON STATE UNIVERSITY

HOOPER, PETER R. SFC AWARD (INDIAN CURRENCY AND U.S. DOLLARS) STRATIGRAPHY AND PETROGENESIS OF THE DECCAN BASALT PROVINCE (EAR-8116656*); 12 MONTHS \$6,350

HOOPER, PETER R. SFC AWARD (INDIAN CURRENCY) FOR FIELD RESEARCH IN DECCAN BASALT PROVINCE, INDIA (INT-8121672*); 12 MONTHS \$8,500

INTERNATIONAL TRAVEL

ARIZONA

TRAVEL AWARD

HUNTER, BRIAN. SFC TRAVEL AWARD (IN INDIAN CURRENCY) TO CONFER WITH BIOCHEMISTS AT THE CENTRAL LEATHER RESEARCH INSTITUTE, MADRAS, INDIA; OCTOBER 5, 1981 - NOVEMBER 25, 1981 (INT-8115001*); 6 MONTHS \$2,675

SCHRODER, DIETMAR K. SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO PARTICIPATE IN THE INTERNATIONAL WORKSHOP ON THE PHYSICS OF SEMICONDUCTOR DEVICES, DELHI, INDIA, NOVEMBER 23-28, 1981 (INT-8118989*); 6 MONTHS \$1,938

BHATTACHARYA, RABINDRA N. SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO PARTICIPATE IN THE GOLDEN JUBILEE CONFERENCE ON STATISTICS: APPLICATION & NEW DIRECTIONS, INDIAN STAT INST., CALCUTTA, INDIA; 1/82 (INT-8120718*); 6 MONTHS \$2,734

STINI, WILLIAM A. SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO PARTICIPATE IN THE INTERNATIONAL SYMPOSIUM ON GENE EXPRESSION AND ITS REGULATION, CALCUTTA, INDIA; JAN. 4-7, 1982 (INT-8121592*); 6 MONTHS \$2,545

CALIFORNIA

DEV, VASU. SPECIAL FOREIGN CURRENCY TRAVEL SUPPORT FOR PARTICIPATION IN THE US-INDIA EXCHANGE OF SCIENTISTS PROGRAM (INT-8115182*); 12 MONTHS \$2,500

STOCKER, BRUCE A. SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO PARTICIPATE IN A SYMPOSIUM ON 'RECENT ADVANCES IN MICROBIAL GENETICS AND GENETIC ENGINEERING', LUCKNOW, INDIA; NOVEMBER 5-7, 1981 (INT-8118150*); 6 MONTHS \$2,039

LEHOVEC, KURT. SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO PARTICIPATE IN THE INTERNATIONAL WORKSHOP ON THE PHYSICS OF SEMICONDUCTOR DEVICES, DELHI, INDIA, NOVEMBER 23-28, 1981 (INT-8113995*); 6 MONTHS \$2,182

KRAWINKLER, HELMUT. SPECIAL FOREIGN CURRENCY TRAVEL AWARD (IN INDIAN CURRENCY) FOR PARTICIPATION IN THE U.S.

INDIA EXCHANGE OF SCIENTISTS PROGRAM (INT-8200184); 12 MONTHS \$2,292

MCNIVEN, HUGH D; SPECIAL FOREIGN CURRENCY TRAVEL AWARD (IN INDIAN CURRENCY) FOR PARTICIPATION IN THE U.S.-INDIA EXCHANGE OF SCIENTISTS PROGRAM (INT-8200188); 12 MONTHS \$2,292

VILLET, WILLEM C B; SPECIAL FOREIGN CURRENCY TRAVEL AWARD (IN INDIAN CURRENCY) FOR PARTICIPATION IN THE U.S.-INDIA EXCHANGE OF SCIENTISTS PROGRAM (INT-8200189); 12 MONTHS \$2,292

SCAWTHORN, CHARLES; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) FOR PARTICIPATION IN THE U.S.-INDIA EXCHANGE OF SCIENTISTS PROGRAM (INT-8205734); 12 MONTHS \$2,292

VANYO, JAMES P; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO PRESENT AT THE INDIAN SPACE RESEARCH ORGANIZATION (ISRO) SATELLITE CENTRE, BANGALORE, INDIA; JULY-AUGUST, 1982 (INT-8211038); 6 MONTHS \$2,600

STURTEVANT, BRADFORD; SFC TRAVEL AWARD (IN INDIAN CURRENCY) TO LECTURE AT THE INDIAN INSTITUTE OF SCI & TO TEACH A COURSE IN EXPERIMENTAL METHODS IN FLUID MECHANICS; BANGALORE, INDIA; 1/15-3/15/83 (INT-82114387); 6 MONTHS \$1,800

RIHAL, SATWANT S; SFC TRAVEL AWARD (IN INDIAN CURRENCY) TO FINALIZE A COLLABORATIVE RESEARCH PROJECT IN EARTHQUAKE ENGINEERING WITH THE UNIVERSITY OF ROORKEE; SEPT. 1982 (INT-8214632); 6 MONTHS \$1,634

COLORADO

PRASAD, KEDAR N; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) FOR RESEARCH CONSULTATION WITH DEVELOPMENTAL BIOLOGISTS IN INDIA (INT-8105116); 6 MONTHS \$1,890

TSUCHIYA, TAKUMI; SFC TRAVEL SUPPORT (IN PAKISTANI CURRENCY) TO PARTICIPATE IN THE INTERNATIONAL SYMPOSIUM ON NEW GENETICAL APPROACHES TO CROP IMPROVEMENT, KARACHI, FEBRUARY 6-10, 1982 (INT-8122159); 6 MONTHS \$1,338

BRINGI, V N; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO GIVE LECTURES IN METEOROLOGY AND DISCUSS COOPERATIVE RESEARCH; KHARAGPUR, MADRAS, INDIA; AUGUST 1982 (INT-8211035); 6 MONTHS \$2,215

CONNECTICUT

ROHNER, EVELYN C; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO ATTEND PARENTAL WARMTH AND ITS CULTURAL CORRELATES IN INDIA: A STOCK-TAKING CONFERENCE (INT-8113215); 6 MONTHS \$1,530

ROHNER, RONALD P; TRAVEL TO ATTEND A CONFERENCE ON PARENTAL WARMTH AND ITS CULTURAL CORRELATES IN INDIA: A STOCK-TAKING CONFERENCE, NEW DELHI, & SANTINIKETAN, INDIA, DECEMBER 14-26, 1981 (INT-8115450); 6 MONTHS \$1,530

MOROWITZ, HAROLD J; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO ATTEND THE INTERNATIONAL SYMPOSIUM ON THE LIVING STATE, DELHI, INDIA; DECEMBER 13 - 19, 1981 (INT-8116418); 6 MONTHS \$1,260

DELAWARE

METZNER, ARTHUR B; SFC TRAVEL SUPPORT FOR PARTICIPATION IN THE U.S. - INDIA EXCHANGE OF SCIENTISTS PROGRAM (INT-8112655); 12 MONTHS \$2,274

BOER, KARL W; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO PARTICIPATE IN THE INTERNATIONAL WORKSHOP ON THE PHYSICS OF SEMICONDUCTOR DEVICES, DELHI, INDIA, NOVEMBER 23-28, 1981 (INT-8115997); 6 MONTHS \$2,274

STEIGMAN, GARY; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO PARTICIPATE IN THE INTERNATIONAL COLLOQUIUM ON BARYON NONCONSERVATION, BOMBAY, INDIA, JANUARY 6-9, 1982 (INT-8120858); 6 MONTHS \$1,434

DISTRICT OF COLUMBIA

SOILS SCIENCE SOCIETY OF AMERICA

STEWART, B A; SFC AWARD (INDIAN CURRENCY) FOR GROUP TRAVEL OF U.S. DELEGATION TO ATTEND THE 13TH CONGRESS OF THE INTERNATIONAL SOCIETY OF SOIL SCIENCE IN NEW DELHI, INDIA, 2/4-16/82 (INT-8114376); 12 MONTHS \$100,000

TRAVEL AWARD

VASISHTA, MADAN M; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) FOR ARRANGING THE PRINTING OF THE NATIONAL EDITION OF AN INTRODUCTION TO INDIAN SIGN LANGUAGE, NEW DELHI, DEC. 1981 (INT-8112350); 6 MONTHS \$1,594

EVANS, BERNARD W; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO CONFER WITH INDIAN SCIENTIST ON GEOLOGY OF THE PRECAMBRIAN PERIOD (INT-8112653); 6 MONTHS \$1,846

REISS, ROBERT; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO PARTICIPATE IN THE 36TH CONGRESS OF INDIAN SOCIETY OF THEORETICAL & APPLIED MECHANICS AND INTERNATIONAL SYMPOSIUM, COIMBATORE, DECEMBER 1981 (INT-8120132); 6 MONTHS \$2,584

BAINUM, PETER M; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO PARTICIPATE IN THE 36TH CONG. OF INDIAN SOC. OF THEORETICAL & APPLIED MECH. & INT'L SYMP. ON FINITE ELEMENT METHODS; COIMBATORE, DEC. 1981 (INT-8120132); 6 MONTHS \$2,606

DIMOND, MARIE T; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO CONFER WITH INDIAN SCIENTISTS IN THE AREA OF REPTILIAN REPRODUCTIVE PHYSIOLOGY, BHOPAL UNIVERSITY, DEC 81-JAN 82 (INT-8120190); 6 MONTHS \$1,335

GHOSH, ARNAB S; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO PARTICIPATE IN THE SIXTH INTERNATIONAL CONFERENCE ON POSI-

TRON ANNIHILATION; ARLINGTON, TEXAS, USA; APRIL 3-7, 1982 (INT-8205181); 6 MONTHS \$2,200

DHAGAMWAR, VASUDHA; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO PARTICIPATE IN THE CONFERENCE ON CAREER AND PROSPECTS OF LAW IN MODERN INDIA; UNIVERSITY OF WISCONSIN; JUNE 7-10, 1982 (INT-8205182); 6 MONTHS \$2,700

SUBRAMANIAN, M A; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO DO RESEARCH UNDER NSF PROJECT IN MATERIALS SCIENCE AT TEXAS A & M UNIVERSITY (INT-8205359); 6 MONTHS \$2,700

AHMAD, IMTIAZ; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO PARTICIPATE IN THE CONFERENCE ON CAREER AND PROSPECTS OF LAW IN MODERN INDIA, MADISON, WISC.; APRIL - JUNE, 1982 (INT-8205373); 6 MONTHS \$2,201

AHMED, AKHLAQ; SFC TRAVEL SUPPORT (IN PAKISTANI CURRENCY) TO PARTICIPATE IN THE 1982 HAZARDOUS MATERIAL SPILLS CONFERENCE, MILWAUKEE, WISC., APRIL 19-22, 1982 (INT-8205762); 6 MONTHS \$1,503

SACHDEVA, USHA; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO CONDUCT COLLABORATIVE RESEARCH IN ENVIRONMENTAL PHYSIOLOGY; STANFORD, CALIFORNIA; JULY-SEPTEMBER 1982 (INT-8211043); 6 MONTHS \$2,500

RAO, C N R; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO PRESENT A LECTURE AT THE CORDON RESEARCH CONFERENCE ON SOLID STATE CHEMISTRY, PLYMOUTH, NEW HAMPSHIRE, JULY 26-30, 1982 (INT-8211044); 6 MONTHS \$2,500

MADE, CHINTAMAN; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO ATTEND THE INTERNATIONAL CONFERENCE ON X-RAY AND ATOMIC INNER-SHELL PHYSICS; EUGENE, OREGON; AUGUST 1982 (INT-8211049); 6 MONTHS \$3,000

LAL, MURARI; SFC TRAVEL AWARD (IN INDIAN CURRENCY) TO CONDUCT RESEARCH ON ATMOSPHERIC RADIATION AND CLIMATE AT TUFTS UNIVERSITY, MEDFORD, MASS.; OCT.-DEC. 1982 (INT-8214404); 6 MONTHS \$2,600

D'CUNHA, ROMOLA; SFC TRAVEL AWARD (INDIAN CURRENCY) TO TEACH AND CONDUCT RESEARCH IN HIGH RESOLUTION INFRARED SPECTROSCOPY AT OHIO STATE UNIVERSITY (INT-8216544); 15 MONTHS \$2,700

FLORIDA

VEZIROGLU, T NEJAT; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO LECTURE AND CONFER ON RESEARCH PROPOSAL IN SOLAR ENERGY, FEB. 18-28, 1982 (INT-8120717); 6 MONTHS \$2,905

HISER, HOMER W; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO LECTURE AND CONFER ON RESEARCH PROPOSAL IN SOLAR ENERGY, ANDHRA PRADESH, INDIA, FEBRUARY 18-28, 1982 (INT-8121013); 6 MONTHS \$3,019

KUMAR, PRADEEP; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO LECTURE AND EXCHANGE IDEAS ON ADVANCED RESEARCH IN PHYSICS, JUNE 7 - 18, 1982 (INT-8205171); 6 MONTHS \$1,436

HAWAII

CHIU, ARTHUR N; SFC TRAVEL SUPPORT FOR PARTICIPATION IN THE U.S. - INDIA EXCHANGE OF SCIENTIST PROGRAM (INT-8111452); 6 MONTHS \$2,018

PAKVASA, SANDIP; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO PARTICIPATE IN THE SYMPOSIUM ON CURRENT TRENDS IN PHYSICS, BHUBANESWAR, INDIA, JANUARY 2-10, 1982 (INT-8120712); 6 MONTHS \$1,870

ILLINOIS

KUMAR, SUDHIR; SFC TRAVEL SUPPORT FOR PARTICIPATION IN THE U.S. - INDIA EXCHANGE OF SCIENTISTS PROGRAM (INT-8112654); 12 MONTHS \$2,592

ROBINSON, DEREK J; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO PARTICIPATE IN THE SYMPOSIUM ON ALGEBRA AND IN APPLICATIONS, DELHI, INDIA, NOV. 30 - DEC. 4, 1981 (INT-8119635); 6 MONTHS \$1,517

AHUJA, NARENDRA; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO CONFER WITH COMPUTER SCIENTISTS IN INDIA, DECEMBER 31, 1981 JANUARY 2, 1982 (INT-8120124); 6 MONTHS \$1,726

SIEGEL, RICHARD W; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO PARTICIPATE IN THE SECOND NATIONAL SYMPOSIUM ON POSITRON ANNIHILATION, MADRAS, INDIA, FEB. 8-11, 1982 (INT-8121083); 6 MONTHS \$1,943

SINHA, SUNIL K; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO PARTICIPATE IN THE SYMPOSIUM ON CURRENT TRENDS IN PHYSICS; BHUBANESWAR, INDIA; JAN. 2-10, 1982 (INT-8121589); 6 MONTHS \$2,640

LAVAN, ZALMAN; SPECIAL FOREIGN CURRENCY TRAVEL AWARD (IN INDIAN CURRENCY) FOR PARTICIPATION IN THE U.S.-INDIA EXCHANGE OF SCIENTISTS PROGRAM (INT-8300185); 12 MONTHS \$1,362

JACOBSON, JEROME; SPECIAL FOREIGN CURRENCY TRAVEL AWARD (IN INDIAN CURRENCY) FOR PARTICIPATION IN THE U.S.-INDIA EXCHANGE OF SCIENTISTS PROGRAM (INT-8210221); 12 MONTHS \$1,527

INDIANA

VARMA, ARVIND; SPECIAL FOREIGN CURRENCY TRAVEL AWARD (IN INDIAN CURRENCY) FOR PARTICIPATION IN THE U.S.-INDIA EXCHANGE OF SCIENTISTS PROGRAM (INT-8112983); 6 MONTHS \$1,829

BISWAS, SUSWETA; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) FOR COLLABORATIVE RESEARCH ON MOTILITY PROTEINS, YESHIVA UNIVERSITY (INT-8118648); 6 MONTHS \$2,011

PURI, MADAN L; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO PARTICIPATE IN THE GOLDEN JUBILEE CONFERENCE ON STATISTICS: APPLICATION & NEW DIRECTIONS, CALCUTTA, INDIA, JAN. 1982 (INT-8120705); 6 MONTHS \$1,641

BASU, SUBHASH C; SPECIAL FOREIGN CURRENCY TRAVEL AWARD (IN INDIAN CURRENCY) FOR PARTICIPATION IN THE U.S.-INDIA EXCHANGE OF SCIENTISTS PROGRAM (INT-8200181); 12 MONTHS \$1,450

HEISER, CHARLES B; SPECIAL FOREIGN CURRENCY TRAVEL AWARD (IN INDIAN CURRENCY) FOR PARTICIPATION IN THE U.S.-INDIA EXCHANGE OF SCIENTISTS PROGRAM (INT-8200183); 12 MONTHS \$1,842

RAO, A R; SPECIAL FOREIGN CURRENCY TRAVEL AWARD (IN INDIAN CURRENCY) FOR PARTICIPATION IN THE U.S.-INDIA EXCHANGE OF SCIENTISTS PROGRAM (INT-8200191); 12 MONTHS \$1,549

KANSAS

EBNER, KURT E; SPECIAL FOREIGN CURRENCY TRAVEL AWARD (INCLUDING INDIAN CURRENCY) FOR PARTICIPATION IN THE U.S.-INDIA EXCHANGE OF SCIENTISTS PROGRAM, NEW DELHI, INDIA, NOVEMBER 1 - 21, 1981 (INT-8100019); 6 MONTHS \$2,700

DUNCAN, TYRONE E; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO PARTICIPATE IN THE WORKING CONFERENCE ON THE THEORY AND APPLICATIONS OF RANDOM FIELDS, BANGALORE, INDIA, JANUARY 4-9, 1982 (INT-8121076); 6 MONTHS \$2,878

SMITH, RAYMOND V; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO LECTURE AND DEVELOP A JOINT PROPOSAL ON STREAM-WATER RESEARCH, BANGALORE, INDIA, JUNE - AUGUST 1982 (INT-8205184); 6 MONTHS \$2,640

KENTUCKY

DESHPANDE, PRADEEP B; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO PRESENT LECTURES IN ADVANCED PROCESS CONTROL AND DISCUSS COLLABORATIVE RESEARCH, MAIRAS & HYDERABAD, INDIA, JULY 1 - AUG 31, 1982 (INT-8211029); 6 MONTHS \$2,647

LOUISIANA

KUO, HUI-HSIUN; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO PARTICIPATE IN THE WORKING CONFERENCE ON THE THEORY AND APPLICATIONS OF RANDOM FIELDS, BANGALORE, INDIA, JANUARY 4-9, 1982 (INT-8122073); 6 MONTHS \$2,852

MARYLAND

NEWCOMB, ROBERT W; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO ATTEND THE INTERNATIONAL SYMPOSIUM ON MICROWAVES AND COMMUNICATIONS, KHARAGPUR, INDIA, DECEMBER 1981 (INT-8116785); 6 MONTHS \$2,660

KANAL, LAVERN N; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO PARTICIPATE IN THE INTERNATIONAL CONFERENCE ON ADVANCES IN INFORMATION SCIENCE AND TECHNOLOGY, CALCUTTA, INDIA, JAN. 2-15, 1982 (INT-8120719); 6 MONTHS \$1,609

PATI, JOGESH C; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO PARTICIPATE IN THE INTERNATIONAL COLLOQUIUM ON BARYON NONCONSERVATION, BOMBAY, INDIA, JANUARY 6-9, 1982 (INT-8121600); 6 MONTHS \$2,200

CHACKO, GEORGE K; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO PRESENT A LECTURE ON ADAPTIVE FORECASTING FOR MANAGEMENT CONTROL, CALCUTTA, INDIA, JULY 10 - AUG. 11, 1982 (INT-8211032); 6 MONTHS \$2,200

MASSACHUSETTS

COHEN, MORRIS; SPECIAL FOREIGN CURRENCY TRAVEL SUPPORT FOR THE PARTICIPATION IN THE U.S.-INDIA EXCHANGE OF SCIENTISTS PROGRAM (INT-8112982); 12 MONTHS \$2,224

STACHEL, JOHN; SPECIAL FOREIGN CURRENCY TRAVEL SUPPORT FOR PARTICIPATION IN THE U.S.-INDIA EXCHANGE OF SCIENTISTS PROGRAM (INT-8112985); 6 MONTHS \$1,406

DAVIS, BERNARD D; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO CONFER WITH MICROBIAL GENETICISTS IN INDIA, TOKYO, JAPAN, OCTOBER 23-25, 1981 (INT-8113001); 6 MONTHS \$2,438

FOYE, WILLIAM O; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO ATTEND THE INDIAN PHARMACEUTICAL CONGRESS, 33RD ANNUAL SESSION, JAIPUR, INDIA, DECEMBER 28 - 30, 1981 (INT-8116419); 6 MONTHS \$1,817

WILSON, RICHARD; SFC TRAVEL SUPPORT (IN PAKISTANI CURRENCY) TO CONFER WITH PHYSICISTS IN PAKISTAN, OCTOBER 1981 (INT-8118468); 6 MONTHS \$2,208

CHATTERJEE, LATA; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO PARTICIPATE IN THE INTERNATIONAL CONFERENCE ON URBAN AND REGIONAL CHANGE IN DEVELOPING COUNTRIES, IIT, KHARAGPUR, DEC. 13-15, 1981 (INT-8119682); 6 MONTHS \$1,555

WALD, GEORGE; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO PARTICIPATE IN THE INTERNATIONAL SEMINAR ON THE LIVING STATE, NEW DELHI, DECEMBER 13-19, 1981 (INT-8119970); 6 MONTHS \$1,391

LAKSHMANAN, T R; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO PARTICIPATE IN THE INTERNATIONAL CONFERENCE ON URBAN AND REGIONAL CHANGE, KHARAGPUR, INDIA, DECEMBER 13 - 15, 1981 (INT-8119145); 6 MONTHS \$1,767

RAMNATH, RUDRAPATN V; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) FOR PARTICIPATION IN THE U.S. - INDIA EXCHANGE OF SCIENTISTS PROGRAM (INT-8120343); 12 MONTHS \$1,525

RAMAMURTI, RAVI; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO PRESENT RESULTS OF RESEARCH ON PUBLIC ENTERPRISES IN

INDIA AND BRAZIL AT 3-4 ACADEMIC CENTERS IN INDIA, AUGUST 1982 (INT-8213309); 6 MONTHS \$1,759

MICHIGAN

DAHLBERG, KENNETH A; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO PARTICIPATE IN THE SYMPOSIUM 'SORGHUM IN THE 80'S', HYDERABAD, INDIA, NOVEMBER 1 - 8, 1981 (INT-8118465); 6 MONTHS \$2,876

CESARI, LAMBERTO; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO PARTICIPATE IN THE INTERNATIONAL CONFERENCE ON RECENT ADVANCES IN NONLINEAR ANALYSIS AND DIFFERENTIAL EQUATIONS, IIT, MADRAS 12/21 - 25/81 (INT-8119142); 6 MONTHS \$2,597

JAIN, RAMESH; SFC TRAVEL AWARD (IN INDIAN CURRENCY) TO PARTICIPATE IN THE INTERNATIONAL SYMPOSIUM ON MICROWAVES AND COMMUNICATIONS, I.I.T. KHARAGPUR, INDIA, DEC. 1981 (INT-8120191); 6 MONTHS \$2,100

VAN DER VELDE, T C; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO PARTICIPATE IN THE INTERNATIONAL COLLOQUIUM ON BARYON NONCONSERVATION, BOMBAY, INDIA, JANUARY 6-9, 1982 (INT-8121601); 6 MONTHS \$1,889

KOUL, HIRA L; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO GIVE ADVANCED RESEARCH SEMINARS IN STATISTICS AND PROBABILITY, POONA, INDIA, JULY 1982 - JUNE 1983 (INT-8211052); 6 MONTHS \$2,622

MINNESOTA

NUSSBAUM, ALLEN; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO PARTICIPATE IN THE INTERNATIONAL WORKSHOP ON THE PHYSICS OF SEMICONDUCTOR DEVICES, DELHI, INDIA, NOVEMBER 23-28, 1981 (INT-8118992); 6 MONTHS \$1,656

MILLER, WILLARD; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO PARTICIPATE IN THE SYMPOSIUM ON ALGEBRA AND ITS APPLICATIONS, DELHI, INDIA, NOV. 30 - DEC. 4, 1981 (INT-8119887); 6 MONTHS \$2,648

EATON, JOHN W; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO PARTICIPATE IN THE INTERNATIONAL WORKSHOP ON BLOOD CELL FUNCTIONS IN GENETIC DISEASES, HYDERABAD, INDIA, NOVEMBER 6, 1981 (INT-8120291); 6 MONTHS \$2,077

WHITE, JAMES G; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO PARTICIPATE IN THE INTERNATIONAL WORKSHOP ON BLOOD CELL FUNCTION IN GENETIC DISEASES, HYDERABAD, INDIA, NOVEMBER 6, 1981 (INT-8120292); 6 MONTHS \$2,077

HELLER, KENNETH; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO PARTICIPATE IN THE INTERNATIONAL COLLOQUIUM ON BARYON NONCONSERVATION, BOMBAY, INDIA, JANUARY 10-15, 1982 (INT-8121071); 6 MONTHS \$2,077

PATHAK, PRAMOD K, AND MITRA, S K; SFC AWARD (IN INDIAN CURRENCY) FOR GUEST SCIENTIST AT THE INDIAN STATISTICAL INSTITUTE NEW DELHI - A SUPPLEMENT (INT-8213498); 6 MONTHS \$1,835

UNIVERSITY OF MINNESOTA

RAO, GUNDU H R; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO PARTICIPATE IN THE INTERNATIONAL WORKSHOP ON BLOOD CELL FUNCTIONS IN GENETIC DISEASES, HYDERABAD, INDIA, NOV 6 - DEC 1, 1981 (INT-8114429); 6 MONTHS \$2,076

MISSOURI

MISSOURI BOTANICAL GARDEN

D'ARCY, WILLIAM G; SYMPOSIUM ON THE TAXONOMY AND THE BIOLOGY OF THE SOLANACEAE, MISSOURI BOTANICAL GARDEN, ST. LOUIS, MISSOURI, AUGUST 3-6 1982 (BSR-8207124); 6 MONTHS \$15,400

TRAVEL AWARD

HILL, JOHN J; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO TEACH AND INITIATE A JOINT RESEARCH PROJECT IN PHYSICS, KOTAYAM, INDIA, JUNE 1, 1982 - JANUARY 15, 1983 (INT-8305177); 6 MONTHS \$2,928

HILL, JOHN J; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO TEACH AND INITIATE A JOINT RESEARCH PROJECT IN PHYSICS, KOTAYAM, INDIA, JUNE 1, 1982 - JANUARY 15, 1983 (INT-8217088); 6 MONTHS \$2,300

UNIVERSITY OF MISSOURI, ROLLA

BATRA, ROMESH C; SFC AWARD (IN INDIAN CURRENCY) FOR GROUP TRAVEL TO THE NINETEENTH ANNUAL MEETING OF THE SOCIETY OF ENGINEERING SCIENCES, ROLA, MO, OCT. 27-29, 1982 (INT-8204411); 18 MONTHS \$16,216

NEW HAMPSHIRE

UNIVERSITY OF NEW HAMPSHIRE, DURHAM

MURDOCH, JOSEPH B; SFC TRAVEL SUPPORT FOR PARTICIPATION IN THE U.S. - INDIA EXCHANGE OF SCIENTISTS PROGRAM (INT-8118651); 12 MONTHS \$1,564

NEW JERSEY

TRAVEL AWARD

REDFIELD, DAVID; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO ATTEND THE INTERNATIONAL WORKSHOP ON PHYSICS OF SEMICONDUCTOR DEVICES, DELHI, INDIA, NOVEMBER 23-28, 1981 (INT-8116262); 6 MONTHS \$2,224

MARAMOROSCH, KARL; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO PARTICIPATE IN THE INDIAN SCIENCE CONGRESS AND TISSUE

CULTURE SEMINAR, MYSORE, INDIA, JAN. 1-7, 1982 (INT-8121584); 6 MONTHS \$1,752

NEW MEXICO

WEAVER, HARRY T; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO PARTICIPATE IN THE INTERNATIONAL WORKSHOP ON THE PHYSICS OF SEMICONDUCTOR DEVICES, DELHI, INDIA, NOVEMBER 23-28, 1981 (INT-8118991); 6 MONTHS \$2,910

SEAGER, CARLETON H; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO PARTICIPATE IN THE INTERNATIONAL WORKSHOP ON THE PHYSICS OF SEMICONDUCTOR DEVICES, DELHI, INDIA, NOVEMBER 23-28, 1981 (INT-8118994); 6 MONTHS \$2,616

MAY, GEPALD W; SPECIAL FOREIGN CURRENCY TRAVEL AWARD (IN INDIAN CURRENCY) FOR PARTICIPATION IN THE U.S.-INDIA EXCHANGE OF SCIENTISTS PROGRAM (INT-8200186); 12 MONTHS \$2,477

NEW YORK

COLUMBIA UNIVERSITY

RUSH, DAVID; SFC TRAVEL SUPPORT FOR PARTICIPATION IN THE U.S.-INDIA EXCHANGE OF SCIENTISTS PROGRAM (INT-812656); 6 MONTHS \$2,900

TRAVEL AWARD

HAYON, ELIE; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO ATTEND THE INDIA CHEMICAL SOCIETY ANNUAL MEETING; MADRAS, INDIA; DECEMBER 1981 (INT-8109210); 6 MONTHS \$1,314

SARKAR, TAPAN K; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO ATTEND THE INTERNATIONAL SYMPOSIUM ON MICROWAVES AND COMMUNICATION; KHARAGPUR, INDIA; DECEMBER 2-31, 1981 (INT-8111163); 6 MONTHS \$1,445

DYNKIN, EUGENE B; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO PARTICIPATE IN THE WORKING CONFERENCE ON THE THEORY & APPLICATIONS OF RANDOM FIELDS; BANGALORE, INDIA; JAN. 4-17, 1982 (INT-8114597); 6 MONTHS \$2,008

EILENBERG, SAMUEL; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO ATTEND THE SYMPOSIUM ON ALGEBRA AND ITS APPLICATIONS; DELHI, INDIA; NOVEMBER 30 - DECEMBER 4, 1981 (INT-8116417); 6 MONTHS \$1,260

MARMUR, JULIUS; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO PARTICIPATE IN A SYMPOSIUM ON RECENT ADVANCES IN MICROBIAL GENETICS AND GENETIC ENGINEERING; LUCKNOW, INDIA; NOVEMBER 5-7, 1981 (INT-8118149); 6 MONTHS \$2,315

RIDEOUT, VINCENT L; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO PARTICIPATE IN THE INTERNATIONAL WORKSHOP ON THE PHYSICS OF SEMICONDUCTOR DEVICES; DELHI, INDIA; NOVEMBER 22-28, 1981 (INT-8118993); 6 MONTHS \$1,496

MARGOLIN, HAROLD; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO PARTICIPATE IN THE NATIONAL MEETING OF THE INDIAN INSTITUTE OF METALS; HYDERABAD, NOVEMBER 1981 (INT-8119561); 6 MONTHS \$1,312

SMITH, ISSAR; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO PARTICIPATE IN THE SYMPOSIUM, RECENT ADVANCES IN MICROBIAL GENETICS AND ENGINEERING; LUCKNOW, INDIA; NOVEMBER 5-7, 1981 (INT-8119568); 6 MONTHS \$2,315

CHATTERJI, MANAS K; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO PARTICIPATE IN THE INTERNATIONAL CONFERENCE ON URBAN-REGIONAL CHANGE IN THE DEVELOPING COUNTRIES, IIT, KHARAGPUR, INDIA, DEC 12-15, 1981 (INT-8119660); 6 MONTHS \$1,682

BASS, HYMAN; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO PARTICIPATE IN THE SYMPOSIUM ON ALGEBRA AND ITS APPLICATIONS, IIT, NEW DELHI, INDIA, NOVEMBER 30 - DECEMBER 4, 1981 (INT-8119688); 6 MONTHS \$2,700

MICCHELLI, CHARLES; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO CONFER WITH INDIAN MATHEMATICIANS, JABALPUR, INDIA, DECEMBER 31 FEBRUARY 1982 (INT-8120121); 6 MONTHS \$2,414

VARSHNEY, PRAMOD K; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO ATTEND THE INTERNATIONAL SYMPOSIUM ON MICROWAVES AND COMMUNICATIONS, IIT, KHARAGPUR, INDIA, DEC. 1981 (INT-8120193); 6 MONTHS \$1,461

MOHAPATRA, RABINDRA N; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO PARTICIPATE IN THE INTERNATIONAL COLLOQUIUM ON BARYON NON-CONSERVATION, BOMBAY, INDIA, JANUARY 6-9, 1982 (INT-8120715); 6 MONTHS \$1,744

ZAKKAY, VICTOR; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO CONFER WITH INDIAN SCIENTISTS ON HEAT TRANSFER, JANUARY 15-FEBRUARY 2, 1982 (INT-8120856); 6 MONTHS \$1,724

KOLTUN, DANIEL S; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO PARTICIPATE IN THE NATIONAL SYMPOSIUM ON MEDIUM ENERGY PHYSICS AND NUCLEAR STRUCTURE, MADRAS, INDIA, FEBRUARY 3-6, 1982 (INT-8121074); 6 MONTHS \$1,853

WALI, KAMESHWAR C; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO PARTICIPATE IN THE INTERNATIONAL COLLOQUIUM ON BARYON NONCONSERVATION; BOMBAY, INDIA; JANUARY 11 - 14, 1982 (INT-8121602); 6 MONTHS \$2,300

KOLLA, VENKATARA; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) FOR PARTICIPATION IN THE U.S.-INDIA EXCHANGE OF SCIENTISTS PROGRAM (INT-8200933); 12 MONTHS \$1,360

STEINKRAUS, KEITH H; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO PARTICIPATE IN THE FIRST INTERNATIONAL FOOD CONFERENCE OF THE ASSOCIATION OF FOOD SCIENTISTS/TECHNOLOGISTS, BANGALORE, IN: 5/23-26/82 (INT-8205172); 6 MONTHS \$2,700

MULLER-SCHWARZE, DIETLAND; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO COLLABORATE IN RESEARCH ON MAMMALIAN PHEROMONES (INT-8205173); 6 MONTHS \$2,200

BRODY, MARCIA; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO INITIATE COOPERATIVE RESEARCH ON PLANT PROTEIN SYNTHESIS AT THE UNIVERSITY OF MADURAI 7/1 TO 8/10/82 (INT-8211033); 6 MONTHS \$1,790

SETHRAMAN, S; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO FINALIZE RESEARCH PROPOSAL NUMERICAL MODELING OF ATMOSPHERIC AND OCEANIC PROCESSES IN THE TROPICS; NEW DELHI, INDIA; 7/21 - 31/82 (INT-8211041); 6 MONTHS \$2,400

LAGHARI, JAVAID R; SFC TRAVEL SUPPORT (IN PAKISTANI CURRENCY) TO PRESENT LECTURES IN HIGH VOLTAGE INSULATION IN TRANSMISSION LINES; HYDERABAD, PAKISTAN; JULY 1-17, 1982 (INT-8211051); 6 MONTHS \$1,500

LUCCIO, ALFREDO U; SFC TRAVEL AWARD (IN INDIAN CURRENCY) TO PRESENT LECTURES ON THE PHYSICS OF SYNCHROTRON RADIATION FROM UNDULATORS AT THE UNIVERSITY OF POONA, OCTOBER 1982 (INT-8214402); 6 MONTHS \$2,200

NORTH CAROLINA

HATFIELD, WILLIAM E; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO CONFER WITH INDIAN CHEMISTS, BOMBAY, DECEMBER 81 - JANUARY 82 (INT-8120111); 6 MONTHS \$1,510

TRIVEDI, KISHOR S; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO COLLABORATE ON COMPUTER SYSTEMS AT INDIAN INSTITUTE OF SCIENCE, BANGALORE, INDIA, JANUARY 1, 1982 (INT-8120702); 6 MONTHS \$2,640

OHIO

TANVEER, SARDAR A; SFC TRAVEL SUPPORT (IN PAKISTANI CURRENCY) TO CONFER WITH SCIENCE EDUCATORS IN PAKISTAN, DEC. 1981-JAN. 1982 (INT-8112053); 6 MONTHS \$1,820

WEISMAN, JOEL; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO CONFER WITH NUCLEAR ENGINEERS IN INDIA; KANPUR, INDIA; DECEMBER 8, 1981 - JANUARY 1, 1982 (INT-8115469); 6 MONTHS \$1,687

MCGURVEY, JOHN D; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO PARTICIPATE IN THE SECOND NATIONAL SYMPOSIUM ON POSITRON ANNIHILATION MADRAS, INDIA, FEBRUARY 5-11, 1982 (INT-8120701); 6 MONTHS \$2,530

EDWARDS, ROBERT V; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO PARTICIPATE IN THE INTERNATIONAL WORKSHOP ON LASER TECHNOLOGY AND APPLICATIONS, MADRAS, INDIA, JANUARY 8-12, 1982 (INT-8121583); 6 MONTHS \$1,637

HARLAN, WILLIAM H; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO CONFER ON RESEARCH ON INDIAN MIGRATION, JANUARY 15 - MARCH 3, 1982 (INT-8122002); 6 MONTHS \$1,600

PENNSYLVANIA

L'ONG, GILBERT N; TRAVEL TO ATTEND INTERNATIONAL SEMINAR ON THE LIVING STATE; NEW DELHI, INDIA; DECEMBER 13 - 19, 1981 (INT-8115866); 6 MONTHS \$2,224

BERTY, JOSEF M; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) FOR PARTICIPATION IN THE U.S.-INDIA EXCHANGE OF SCIENTIST PROGRAM (INT-8116263); 12 MONTHS \$2,448

LARSEN, SIGURD Y; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO CONFER WITH PHYSICISTS AT BANARAS HINDU UNIVERSITY; OCTOBER 15 NOVEMBER 15, 1981 (INT-8118466); 6 MONTHS \$2,422

PERRY, ROBERT P; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO CONFER WITH MOLECULAR GENETICISTS IN INDIA, NOVEMBER - DECEMBER, 1981 (INT-8119562); 6 MONTHS \$1,998

KAUFFMAN, STUART A; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO PARTICIPATE IN THE INTERNATIONAL SEMINAR ON THE LIVING STATE, NEW DELHI, DECEMBER 13-19, 1981 (INT-8119971); 6 MONTHS \$2,274

SHAH, YATISH T; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) FOR PARTICIPATION IN THE U.S.-INDIA EXCHANGE OF SCIENTISTS PROGRAM (INT-8120278); 12 MONTHS \$1,500

WEITZ, CHARLES A; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO PARTICIPATE IN THE GOLDEN JUBILEE CONFERENCE ON HUMAN GENETICS AND ADAPTATION, CALCUTTA, FEBRUARY 1-5, 1982 (INT-8120706); 6 MONTHS \$2,372

LANDE, KENNETH; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO PARTICIPATE IN THE INTERNATIONAL COLLOQUIUM ON BARYON NONCONSERVATION, BOMBAY, INDIA, JANUARY 3-16, 1982 (INT-8120714); 6 MONTHS \$2,248

TOMAZINIS, ANTHONY R; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO CONFER ON JOINT RESEARCH PROJECT IN TRANSPORTATION MODELING, JANUARY 1982 (INT-8120716); 6 MONTHS \$2,365

FREED, NORMAN; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO PARTICIPATE IN THE SYMPOSIUM ON MEDIUM ENERGY PHYSICS AND NUCLEAR STRUCTURE MADRAS, INDIA, FEBRUARY 3-6, 1982 (INT-8120854); 6 MONTHS \$1,488

LANGACKER, PAUL G; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO PARTICIPATE IN THE INTERNATIONAL COLLOQUIUM ON BARYON NONCONSERVATION, BOMBAY, INDIA, JANUARY 6-9, 1982 (INT-8121082); 6 MONTHS \$2,008

VIKRAM, C S; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO PARTICIPATE IN THE TENTH SYMPOSIUM ON OPTICS, MADRAS, INDIA, JANUARY 8-10, 1982 (INT-8121576); 6 MONTHS \$2,622

TABAKIN, FRANK; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO PARTICIPATE IN THE CONFERENCE ON MEDIUM ENERGY PHYSICS AND NUCLEAR STRUCTURE; MADRAS, INDIA; FEB. 3-6, 1982 (INT-8121585); 6 MONTHS \$1,735

RHODE ISLAND

LOFERSKI, J. SEPH J.; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO PARTICIPATE IN THE INTERNATIONAL WORKSHOP ON THE PHYSICS OF SEMICONDUCTOR DEVICES, DELHI, INDIA, NOVEMBER 23-28, 1981 (INT-8118999); 6 MONTHS \$2,322

MORSE, THEODORE F.; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO PRESENT LECTURES ON LASER FUNDAMENTALS AND APPLICATIONS, I.I.T. KANPUR, DELHI, INDIA, 5-19, 1981 (INT-8119968); 6 MONTHS \$1,483

TENNESSEE

CHATTERJEE, ARUN; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO PRESENT LECTURES ON TRANSPORTATION PLANNING AND MANAGEMENT SYSTEMS, MADRAS, DELHI, AND KHARAGPUR, INDIA; AUG 16 - SEPT 3, 1982 (INT-8211030); 6 MONTHS \$1,930

TEXAS

BOCKRIS, JOHN O.; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO PARTICIPATE IN THE MEETING OF THE SOCIETY FOR ADVANCEMENT OF ELECTROCHEMICAL TECHNOLOGY, KARAIKUDI, INDIA; OCTOBER 8-12, 1981 (INT-8118467); 6 MONTHS \$1,589

UTAH

HESS, WILFORD M.; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO DISCUSS COOPERATIVE RESEARCH WITH SCIENTISTS AT PANTNAGAR UNIVERSITY (INT-8112059); 6 MONTHS \$1,789

GANDHI, OM P.; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO PARTICIPATE IN THE INTERNATIONAL SYMPOSIUM ON MICROWAVES AND COMMUNICATIONS, KHARAGPUR, INDIA, DEC., 1981 (INT-8120194); 6 MONTHS \$2,243

GOODEARL, KENNETH R.; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO PARTICIPATE IN THE SYMPOSIUM ON ALGEBRA AND ITS APPLICATIONS, DELHI, INDIA; NOV 30 - DEC 4, 1981 (INT-8120233); 6 MONTHS \$1,584

SMITH, JEAN B.; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO LECTURE AND CONFER ON REPRODUCTIVE BIOLOGY, NEW DELHI, INDIA, FEBRUARY 20-28, 1982 (INT-8121579); 6 MONTHS \$2,700

SMITH, DAVID L.; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO LECTURE ON MASS SPECTROMETRY, KARACHI, PAKISTAN, JAN 9 - FEB 28, 1982 (INT-8121580); 6 MONTHS \$2,667

CAMPBELL, DOUGLAS M.; SPECIAL FOREIGN CURRENCY TRAVEL AWARD (IN INDIAN CURRENCY) FOR PARTICIPATION IN THE U.S.-INDIA EXCHANGE OF SCIENTISTS PROGRAM (INT-8200182); 12 MONTHS \$2,448

UTAH STATE UNIVERSITY

CALDWELL, MARTYN M.; SPECIAL FOREIGN CURRENCY AWARD (IN INDIAN AND U.S. CURRENCY) FOR GROUP TRAVEL TO A WORKSHOP IN THE EFFECTS OF ULTRAVIOLET RADIATION ON PLANTS (INT-8210527*); 12 MONTHS \$31,811

VIRGINIA

VIRGINIA POLYTECHNIC INSTITUTE

TROWER, W. PETER; SFC AWARD (PAKISTANI CURRENCY AND U.S. DOLLARS) FOR GROUP TRAVEL GRANT FOR U.S. PARTICIPATION IN THE 7TH INTERNATIONAL SUMMER COLLEGE ON PHYSICS & TEMPORARY NEEDS-JUNE 1982 (INT-8200037*); 12 MONTHS \$33,000

WASHINGTON

TRAVEL AWARD

VENKATA, SUBRAHMAN S.; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO PARTICIPATE IN THE SYMPOSIUM ON THEORY AND APPLICATION OF DIGITAL CONTROL, NEW DELHI, INDIA, JANUARY 4-8, 1982 (INT-8121073); 6 MONTHS \$2,310

WISCONSIN

GUCKEL, H.; SFC TRAVEL SUPPORT (IN INDIAN CURRENCY) TO PARTICIPATE IN THE INTERNATIONAL WORKSHOP ON THE PHYSICS OF SEMICONDUCTOR DEVICES, DELHI, INDIA, NOVEMBER 23-28, 1981 (INT-8118990); 6 MONTHS \$2,592

NSF Fellowship Awards, FY 1982

Graduate and Minority Graduate Fellowships

ARIZONA

Arizona State University
None*: Support Award(SPE-8264150); 60
Months \$10,900

University of Arizona
None: Support Award(SPE-8264151); 60
Months \$87,200

ARKANSAS

University of Arkansas-Fayetteville
None: Support Award(SPE-8264149); 60
Months \$10,387

CALIFORNIA

California Institute of Technology
None: Support Award(SPE-8264146); 60
Months \$588,600

Umboldt State University
None: Support Award(SPE-8264109); 60
Months \$10,900

Naval Postgraduate School
None: Support Award(SPE-8264082); 00
Months \$0

Occidental College
None: Support Award(SPE-8264072); 60
Months \$10,900

Stanford University
None: Support Award(SPE-8264047); 60
Months \$1,188,896

University of California-Davis
None: Support Award(SPE-8264144); 60
Months \$152,600

University of California, Berkeley
None: Support Award(SPE-8264145); 60
Months \$894,485

University of California, Irvine
None: Support Award(SPE-8264143); 60
Months \$37,271

University of California, Los Angeles
None: Support Award(SPE-8264142); 60
Months \$88,362

University of California, Riverside
None: Support Award(SPE-8264140); 60
Months \$32,700

University of California-San Diego
None: Support Award(SPE-8264141); 60
Months \$272,500

University of California, San Francisco
None: Support Award(SPE-8264139); 60
Months \$109,000

University of California-Santa Barbara
None: Support Award(SPE-8264138); 60
Months \$78,880

University of California, Santa Cruz
None: Support Award(SPE-8264137); 60
Months \$87,200

University of Southern California
None: Support Award(SPE-8264053); 60
Months \$15,200

COLORADO

Colorado State University
None: Support Award(SPE-8264132); 60
Months \$24,500

None: Support Award(SPE-8264168); 12
Months \$10,900

University of Colorado-Boulder
None: Support Award(SPE-8264131); 60
Months \$61,190

University of Colorado, HSC
None: Support Award(SPE-8264130); 60
Months \$10,900

University of Denver
None: Support Award(SPE-8264160); 60
Months \$5,450

CONNECTICUT

Yale University
None: Support Award(SPE-8264012); 60
Months \$414,200

DISTRICT OF COLUMBIA

George Washington University
None: Support Award(SPE-8264119); 60
Months \$46,300

Georgetown University
None: Support Award(SPE-8264120); 60
Months \$13,600

Howard University
None: Support Award(SPE-8264110); 60
Months \$32,700

FLORIDA

Florida State University
None: Support Award(SPE-8264122); 60
Months \$10,900

University of Florida
None: Support Award(SPE-8264121); 60
Months \$18,720

University of South Florida
None: Support Award(SPE-8264050); 60
Months \$10,900

GEORGIA

Georgia Institute of Technology
None: Support Award(SPE-8264117); 60
Months \$58,580

Georgia Southern College
None: Support Award(SPE-8264118); 60
Months \$10,900

University of Georgia
None: Support Award(SPE-8264116); 60
Months \$52,100

ILLINOIS

Northwestern University
None: Support Award(SPE-8264074); 60
Months \$152,600

Southern Illinois University-Carbondale
None: Support Award(SPE-8264049); 60
Months \$10,000

University of Chicago

None: Support Award(SPE-8264135); 60
Months \$100,000

University of Illinois-Chicago Circle
None: Support Award(SPE-8264107); 60
Months \$10,900

University of Illinois-Urbana
None: Support Award(SPE-8264108); 60
Months \$272,500

INDIANA

Indiana University - Bloomington
None: Support Award(SPE-8264106); 60
Months \$43,090

Purdue University
None: Support Award(SPE-8264062); 60
Months \$109,000

University of Notre Dame
None: Support Award(SPE-8264073); 60
Months \$10,900

IOWA

Iowa State University-Science and Technology
None: Support Award(SPE-8264104); 60
Months \$41,322

None: Support Award(SPE-8264169); 12
Months \$11,710

KANSAS

Kansas State University
None: Support Award(SPE-8264102); 60
Months \$10,900

University of Kansas
None: Support Award(SPE-8264101); 60
Months \$32,475

KENTUCKY

University of Kentucky
None: Support Award(SPE-8264099); 60
Months \$54,500

LOUISIANA

Louisiana State University-Baton Rouge
None: Support Award(SPE-8264098); 60
Months \$43,600

Louisiana State University-Medical Center
None: Support Award(SPE-8264097); 60
Months \$10,900

Tulane University
None: Support Award(SPE-8264029); 60
Months \$21,800

MAINE

University of Maine-Orono
None: Support Award(SPE-8264096); 60
Months \$10,900

MARYLAND

Johns Hopkins University
None: Support Award(SPE-8264103); 60
Months \$185,300

*As used in this list, "none" indicates no principal investigator; award went to the institution only.

University of Maryland

None: Support Award(SPE-8264095); 60
Months \$65,400

MASSACHUSETTS**Boston University**

None: Support Award(SPE-8264148); 60
Months \$32,700

Harvard University

None: Support Award(SPE-8264113); 60
Months \$1,249,700

College of the Holy Cross

None: Support Award(SPE-8264112); 00
Months \$0

Massachusetts Institute of Technology

None: Support Award(SPE-8264094); 60
Months \$1,473,200

University of Massachusetts

None: Support Award(SPE-8264093); 60
Months \$65,400

MICHIGAN**Michigan State University**

None: Support Award(SPE-8264089); 60
Months \$174,400

University of Michigan

None: Support Award(SPE-8264088); 60
Months \$100,000

Wayne State University

None: Support Award(SPE-8264018); 60
Months \$10,900

MINNESOTA**University of Minnesota**

None: Support Award(SPE-8264159); 60
Months \$294,300

MISSISSIPPI**University of Mississippi - Medical Center**

None: Support Award(SPE-8264086); 60
Months \$10,900

MISSOURI**University of Missouri - Columbia**

None: Support Award(SPE-8264085); 60
Months \$8,950

University of Missouri - Rolla

None: Support Award(SPE-8264084); 60
Months \$10,900

Washington University

None: Support Award(SPE-8264020); 60
Months \$12,285

NEBRASKA**University of Nebraska**

None: Support Award(SPE-8264081); 60
Months \$0,900

NEVADA**University of Nevada**

None: Support Award(SPE-8264080); 60
Months \$10,900

NEW HAMPSHIRE**Dartmouth College**

None: Support Award(SPE-8264125); 60
Months \$7,850

NEW JERSEY**Princeton University**

None: Support Award(SPE-8264053); 60
Months \$705,500

Rutgers State University

None: Support Award(SPE-8264055); 60
Months \$10,900

NEW MEXICO**New Mexico State University**

None: Support Award(SPE-8264164); 12
Months \$10,900

University of New Mexico

None: Support Award(SPE-8264078); 60
Months \$10,900

NEW YORK**Columbia University**

None: Support Award(SPE-8264129); 60
Months \$196,200

Cornell University

None: Support Award(SPE-8264126); 60
Months \$510,000

CUNY-Central Office

None: Support Award(SPE-8264133); 60
Months \$43,600

New School for Social Research

None: Support Award(SPE-8264079); 60
Months \$10,900

New York University

None: Support Award(SPE-8264077); 60
Months \$14,025

Rensselaer Polytechnical Institute

None: Support Award(SPE-8264060); 60
Months \$21,246

Rockefeller University

None: Support Award(SPE-8264056); 60
Months \$79,590

SUNY State University-Albany

None: Support Award(SPE-8264046); 60
Months \$21,590

SUNY State University-Binghamton

None: Support Award(SPE-8264045); 60
Months \$2,700

SUNY State University-Buffalo

None: Support Award(SPE-8264043); 60
Months \$10,900

Syracuse University

None: Support Award(SPE-8264040); 60
Months \$29,760

Teachers College

None: Support Award(SPE-8205556); 60
Months \$8,200

None: Support Award(SPE-8264128); 60
Months \$10,900

University of Rochester

None: Support Award(SPE-8264057); 60
Months \$42,000

Yeshiva University

None: Support Award(SPE-8264011); 60
Months \$21,800

NORTH CAROLINA**Duke University**

None: Support Award(SPE-8264124); 60
Months \$174,400

North Carolina State University-Raleigh

None: Support Award(SPE-8264076); 60
Months \$39,835

University of North Carolina Chapel Hill

None: Support Award(SPE-8264075); 60
Months \$152,600

University of North Carolina, Systems Office

None: Support Award(SPE-8264167); 12
Months \$21,800

OHIO**Case Western Reserve University**

None: Support Award(SPE-8264158); 60
Months \$10,900

Kent State University

None: Support Award(SPE-8264100); 60
Months \$10,900

Miami University-Central Office

None: Support Award(SPE-8264091); 60
Months \$2,700

Ohio State University

None: Support Award(SPE-8264071); 60
Months \$141,700

University of Cincinnati

None: Support Award(SPE-8264134); 60
Months \$13,600

Wright State University

None: Support Award(SPE-8264014); 60
Months \$10,900

OKLAHOMA**University of Oklahoma-Central Office**

None: Support Award(SPE-8264068); 60
Months \$10,900

University of Oklahoma, HSC

None: Support Award(SPE-8264069); 60
Months \$10,900

OREGON**Oregon State University**

None: Support Award(SPE-8264067); 60
Months \$10,900

University of Oregon-Eugene

None: Support Award(SPE-8264066); 60
Months \$13,755

PENNSYLVANIA**Carnegie-Mellon University**

None: Support Award(SPE-8264136); 60
Months \$207,100

Hahnemann Medical College and Hospital

None: Support Award(SPE-8264115); 60
Months \$10,900

Pennsylvania State University

None: Support Award(SPE-8264065); 60
Months \$10,900

Temple University

None: Support Award(SPE-8264039); 60
Months \$10,900

University of Pennsylvania

None: Support Award(SPE-8264157); 60
Months \$44,225

University of Pittsburgh

None: Support Award(SPE-8264064); 60
Months \$17,200

PUERTO RICO**University of Puerto Rico - Medical Science Campus**

None: Support Award(SPE-8264009); 60
Months \$10,900

University of Puerto Rico - Rio Piedras

None: Support Award(SPE-8264010); 60
Months \$10,900

RHODE ISLAND

- Brown University**
None: Support Award(SPE-8264147); 60
Months \$119,900
- University of Rhode Island**
None: Support Award(SPE-8264059); 60
Months \$3,180

SOUTH CAROLINA

- University of South Carolina-Columbia**
None: Support Award(SPE-8264051); 60
Months \$10,900

SOUTH DAKOTA

- University of South Dakota**
None: Support Award(SPE-8264052); 60
Months \$10,900

TENNESSEE

- Meharry Medical College**
None: Support Award(SPE-8264092); 60
Months \$10,900
- Memphis State University**
None: Support Award(SPE-8264090); 60
Months \$10,900
- University of Tennessee - HSC**
None: Support Award(SPE-8264037); 60
Months \$10,900
- Vanderbilt University**
None: Support Award(SPE-8264026); 60
Months \$46,780

TEXAS

- Rice University**
None: Support Award(SPE-8264058); 60
Months \$55,213
- Sam Houston State University**
None: Support Award(SPE-8264054); 60
Months \$10,900
- Southern Methodist University**
None: Support Award(SPE-8264048); 60
Months \$10,900

Sul Ross State University

- None: Support Award(SPE-8264041); 60
Months \$10,900
- Texas A&M University**
None: Support Award(SPE-8264036); 60
Months \$7,578
- Texas Christian University**
None: Support Award(SPE-8264035); 60
Months \$10,900
- Texas Tech. University**
None: Support Award(SPE-8264034); 60
Months \$3,180
- University of Houston-Central Office**
None: Support Award(SPE-8264111); 60
Months \$65,400
- University of Texas-HSC, Dallas**
None: Support Award(SPE-8264031); 60
Months \$21,800
- University of Texas, Arlington**
None: Support Award(SPE-8264033); 60
Months \$32,700
- University of Texas, Austin**
None: Support Award(SPE-8264032); 60
Months \$196,200
- University of Texas-Medical Branch, Galveston**
None: Support Award(SPE-8264030); 60
Months \$10,900

UTAH

- University of Utah**
None: Support Award(SPE-8264027); 60
Months \$60,560
- Utah State University**
None: Support Award(SPE-8264028); 60
Months \$14,080
- None: Support Award(SPE-8264165); 00
Months \$7,720

VERMONT

- University of Vermont**
None: Support Award(SPE-8264025); 60
Months \$10,250

VIRGINIA

- Eastern Virginia Medical School**
None: Support Award(SPE-8264123); 60
Months \$10,900
- University of Virginia**
None: Support Award(SPE-8264024); 60
Months \$109,000
- Virginia Commonwealth University**
None: Support Award(SPE-8264023); 60
Months \$5,811
- Virginia Poly. Institute**
None: Support Award(SPE-8264022); 60
Months \$11,440
- None: Support Award(SPE-8264166); 00
Months \$10,900

WASHINGTON

- University of Washington**
None: Support Award(SPE-8264019); 60
Months \$370,600
- Washington State University**
None: Support Award(SPE-8264021); 60
Months \$15,750

WISCONSIN

- University of Wisconsin - Madison**
None: Support Award(SPE-8264016); 60
Months \$566,800
- University of Wisconsin - Milwaukee**
None: Support Award(SPE-8264015); 60
Months \$2,700
- None: Support Award(SPE-8264162); 60
Months \$8,200

WYOMING

- University of Wyoming**
None: Support Award(SPE-8264013); 00
Months \$0

Awards by Program and Field

<i>Fields</i>	<i>Totals</i>	<i>Graduate Fellowships</i>	<i>Minority Graduate Fellowships</i>
Engineering Sciences	105	94	11
Aeronautical	3	3	0
Bio/Engineering	3	2	1
Chemical	35	30	5
Civil	4	4	0
Electrical	26	24	2
Electronics	7	7	0
Materials	3	3	0
Mechanics	3	3	0
Mechanical	17	14	3
Metallurgical	1	1	0
Nuclear	2	2	0
Engineering, Other	1	1	0
Mathematical Sciences	62	59	3
Algebra or Number Theory	8	8	0
Analysis	7	5	2
Applications of Math.	9	8	1
Computer Science	32	32	0
Geometry	1	1	0
Probability & Statistics	2	2	0
Topology	3	3	0
Physical Sciences	120	112	8
Astronomy	4	3	1
Atmospheric Sciences	2	2	0
Chemistry	44	40	4
Earth Sciences	34	32	2
Physics	36	35	1
Life & Medical Sciences	156	141	15
Agriculture	5	4	1
Biochemistry	23	20	3
Biology	51	45	6
Biophysics	3	3	0
Botany	12	12	0
Genetics	12	12	0
Microbiology	14	11	3
Pathology	2	2	0
Physiology	6	6	0
Life Sciences, Other	1	1	0
Medical Sciences	15	15	0
Zoology	12	10	2
Social & Behavioral Sciences	108	90	18
Anthropology	18	17	1
Archaeology	5	4	1
Economics	30	26	4
Geography	1	1	0
History & Phil. of Sci.	1	1	0
International Relations	2	1	1
Linguistics	3	3	0
Political Science	4	3	1
Sociology	7	5	2
Urban & Regional Planning	3	2	1
Psychology	34	27	7
TOTAL USA	551	496	55
TOTAL FOREIGN	4	4	0
GRAND TOTAL	555	500	55

Institutions (U.S. and Foreign) Chosen by Fellowship Awardees

<i>U.S. Institutions</i>	<i>Totals</i>	<i>Graduate Fellowships</i>	<i>Minority Graduate Fellowships</i>
ARIZONA			
Arizona State University	1	0	1
Univ. of Arizona	3	3	0
CALIFORNIA			
Cal. Inst. Technology	16	14	2
Stanford Univ.	62	57	5
Univ. of Cal., Berkeley	48	43	5
Univ. of Cal., Davis	3	3	0
Univ. of Cal., Irvine	1	0	1
Univ. of Cal., Los Angeles	3	1	2
Univ. of Cal., San Diego	6	6	0
Univ. of Cal., San Francisco	4	4	0
Univ. of Cal., Santa Barbara	2	1	1
COLORADO			
Univ. of Colorado	2	2	0
CONNECTICUT			
Yale Univ.	11	11	0
DISTRICT OF COLUMBIA			
Georgetown Univ.	1	0	1
FLORIDA			
Florida State	1	1	0
Univ. of Florida	1	1	0
GEORGIA			
Georgia Inst. of Tech.	1	1	0
HAWAII			
Univ. of Hawaii	1	1	0
ILLINOIS			
Northwestern Univ.	4	4	0
Univ. of Chicago	10	9	1
Univ. of Illinois, Chicago Circle	1	1	0
Univ. of Illinois, Urbana	9	6	3
INDIANA			
Indiana Univ., Bloomington	1	1	0
Notre Dame Univ.	1	1	0
KANSAS			
Univ. of Kansas	1	1	0
KENTUCKY			
Univ. of Kentucky	3	3	0
LOUISIANA			
Louisiana State Univ.	2	2	0
MAINE			
Univ. of Maine	1	1	0
MARYLAND			
John Hopkins Univ.	8	6	2
Univ. of Maryland	2	2	0
MASSACHUSETTS			
Boston Univ.	1	0	1
Brandeis Univ.	2	2	0
Harvard Univ.	45	43	2

<i>U.S. Institutions</i>	<i>Totals</i>	<i>Graduate Fellowships</i>	<i>Minority Graduate Fellowships</i>
Mass. Inst. of Technology	96	89	7
Univ. of Massachusetts	2	2	0
MICHIGAN			
Michigan State Univ.	7	6	1
Univ. of Michigan	14	14	0
Wayne State Univ.	1	1	0
MINNESOTA			
Univ. of Minnesota	14	13	1
MISSOURI			
Univ. of Missouri, Rolla	1	1	0
Washington Univ.	3	3	0
NEBRASKA			
Univ. of Nebraska, Lincoln	1	1	0
NEVADA			
Univ. of Nevada	1	0	1
NEW HAMPSHIRE			
Dartmouth	1	1	0
NEW JERSEY			
Princeton Univ.	19	18	1
NEW YORK			
Columbia Univ.	6	6	0
Cornell Univ.	26	24	2
New School for Social Research	1	0	1
New York Univ.	1	1	0
SUNY, Albany	1	1	0
SUNY, Stony Brook	3	3	0
Univ. of Rochester	1	1	0
Yeshiva Univ.	1	1	0
NORTH CAROLINA			
Duke Univ.	11	11	0
N. Carolina State Univ., Raleigh	2	2	0
Univ. of N.C., Chapel Hill	4	3	1
OHIO			
Ohio State Univ.	2	2	0
Univ. of Cincinnati	1	1	0
Wright State Univ.	1	0	1
OKLAHOMA			
Univ. of Oklahoma	1	1	0
OREGON			
Oregon State Univ.	2	2	0
PENNSYLVANIA			
Carnegie-Mellon Univ.	3	3	0
Hahnemann Med. Coll.	1	1	0
Pennsylvania State Univ.	1	1	0
Temple Univ.	1	0	1
Univ. of Pennsylvania	8	6	2
Univ. of Pittsburgh	1	1	0
PUERTO RICO			
Univ. of P.R., Med School	1	0	1
Univ. of P.R., Rio Piedras	1	0	1

<i>U.S. Institutions</i>	<i>Totals</i>	<i>Graduate Fellowships</i>	<i>Minority Graduate Fellowships</i>
RHODE ISLAND			
Brown Univ.	3	3	0
SOUTH CAROLINA			
Univ. of South Carolina	1	1	0
SOUTH DAKOTA			
Univ. of South Dakota	1	1	0
TENNESSEE			
Memphis State Univ.	1	0	1
TEXAS			
Rice Univ.	1	0	1
Southern Methodist Univ.	1	0	1
Texas Christian Univ.	1	1	0
Univ. of Houston	1	1	0
Univ. of Texas, Austin	4	4	0
UTAH			
Univ. of Utah	2	2	0
VIRGINIA			
Va. Polytech. Inst.	1	1	0
WASHINGTON			
Univ. of Washington	12	11	1
Washington State Univ.	1	1	0
WEST VIRGINIA			
Univ. of West Virginia	1	1	0
WISCONSIN			
Univ. of Wisconsin, Madison	21	18	3
TOTAL U.S.	551	496	55

<i>Foreign Institutions</i>	<i>Totals</i>	<i>Graduate Fellowships</i>	<i>Minority Graduate Fellowships</i>
CANADA			
Univ. of Toronto	1	1	0
UNITED KINGDOM			
Imperial College	1	1	0
Orient and Africa St.	1	1	0
Univ. of Cambridge	1	1	0
TOTAL FOREIGN	4	4	0
GRAND TOTAL	555	500	55

Individuals Offered Graduate Fellowships (by state of permanent residence and field of study)

ALABAMA

Wright, Donald R., Phys/State

ALASKA

Sackinger, Philip A., E/Chemical

ARIZONA

Dodson, Craig D., Chem/Orgnc
Harvey, Alan W., Ecology
McDonald, David B., Ecology
McIntyre, David H., Phys/Atome
Poor, Allen J., Anthropology
Raimondi, Peter T., Ecology
Whatten, Ross W., Genetics

ARKANSAS

Scarsdale, Joe N. Jr., Chemphyscl
Schumacher, Benjamin W., Theor Phys

CALIFORNIA

Antonsen, Kris, E/Chemical
Apple, Randolph T., Cell Biol
Babcock, Arthur L., Oceanography
Bedford, Martha E., Anthropology
Belnap, Jaynie, Ecology
Block, Jonathan L., Math/Analy
Brandenburg, Roberta J., Molec Biol
Braun, Ann R., Entomology
Canright, David R., E/Mechanc
Carlin, Leslie E., Anthropolgy
Carter, Emily A., Chem/Orgnc
Chertock, Beth, Oceanography
Contractor, Kirin N., Anthropology
Dixon, Lance J., Phys/Part
Downing, Cathryn J., Psych/Exp
Dunwoody, John C., E/Electron
Eisberg, Joann, Hst of Sci
Eyre, Stephen L., Anthropology
Freeland, Stephen C., E/Electrcl
Friedman, William E., Botany
Gayle, Howard L., Math/Cmptr
Groff, Paul A., Botany
Gronlund, Lisbeth C., Theor Phys
Hellman, Eric S., E/Electrcl
Holstege, Mary A., Math/Cmptr
Jensen, Jens H., Theor Phys
Johnson, Clark M., Geology
Johnson, Kersten L., Earth/Env
Katzen, Alisa L., Molec Biol
Kedzie, Christopher R., E/Aeronaut
Kopania, Andrew A., Geology
LePage, Teresa J., Chem/Orgnc
Levergood, Barbara J., Linguistics
Loretz, Linda J., Pharmacol
Louie, Eddy C., E/Chemical
Lowery, Mary S., Life Sci
Martin, Christopher H., Biochem
Martin, Gary J., Anthropolgy
McGovern, William M., Math/Algbr
McKenna, Stephen T., Chem/Inorg
Merlic, Craig A., Chem/Organc
Michon, John J., Molec Biol
Naganuma, Kenneth H., Ecology

Nerad, Bruce A., E/Chemical
Oberbauer, Anita M., Nutrition
Palmer, Davis B., E/Civil
Paulikas, Nancy M., Math/Cmptr
Percy, Amy J., Microbiol
Platenak, John R., Biochem
Platt, John C., Math/Cmptr
Rhode, Paul W., Economics
Rich, Dianne M., Anthropology
Robey, Ellen A., Math/Cmptr
Sater, Amy K., Zoology
Schultz, Eric T., Ecology
Shah, Deepak S., E/Electron
Smale, Stephen T., Biochem
Small, Bradford G., Phys/Fluid
Sonner, James M., Biochem
Sproat, Richard W., Linguistics
Sutherland, Ann E., Anatomy
Thomas, Eileen P., Genetics
Thompson, Marcy L., Math/Algbr
Tu, Jerome C., E/Electron
Tygar, Justin D., Math/Cmptr
Vidale, John E., Geophysics
White, Steven R., Theor Phys
Whitehead, John C., E/Mechanc
Wordeman, Linda., Cell Biol
Wurf, Elissa D., Psych/Socl
Zahs, Kathleen R., Med Sci
Zimmerman, Carl E., Math/Cmptr

COLORADO

Cline, James M., Phys/Space
Coleman, William B., Economics
Devaud, Genevieve, E/Material
Folley, Linda S., Cell Biol
Kocher, Thomas D., Genetics
Mead, Paul S., Ecology
Reinitz, John B., Med Sci

CONNECTICUT

Beigel, Richard J., Math/Algbr
Berman, Susan F., Biochem
Costenoble, Steven R., Math/Topol
Eppinger, Jeffrey L., Math/Cmptr
Grody, Miles H., Anthropology
Herzenberg, Stephen A., Economics
Lebed, Jay A., Hst of Sci
Merrill, Barbara M., Biochem
Moore, William C., E/Electrcl

DELAWARE

Gonzales, Iris P., Genetics
Huxtable, Barton D., Theor Phys

DISTRICT OF COLUMBIA

DeLong, James B., Economics
Kusmin, Lorin D., Economics
Rubin, Allan M., Geology

FLORIDA

Fijan, Robert S., E/Mechancs
Ibarra, Herminia M., Psychology
Kaizer, Daniel A., Ecology

Levy, David R., E/Aeronaut
Perry, Kevin R., Math/Topol
Spector, Donald A., Theor Phys

GEORGIA

Bird, Edythe P., Psych/Exp
Hughes, Barnwell W., Math/Apps
Humphrey, Joseph W. III, E/Mechanc
Lang, Robert J., E/Electrcl
Prell, Mark A., Economics

HAWAII

Bender, Judith L., Biochem
Cheng, Nancy, Molec Biol
Lie, John Jaehoon, Sociology

IDAHO

Castles, Janis L., E/Chemical
Dickey, Sara A., Anthropology

ILLINOIS

Anderson, Shawn D., E/Mechanc
Ang, James A., E/Mechanc
Axup, Andrew W., Chem/Inorg
Beernink, Kurt P., E/Nuclear
Bradof, Kristine L., Geology
Carlson, Norman W., E/Chemical
Cushman, Lori S., Ecology
Dembski, William A., Psychology
Ferrantino, Michael J., Economics
Garino, Terry J., Engineer
Hill, Beth L., Microbiol
Hopkins, Mark A., E/Electron
Hsu, Stephen C., E/Electrcl
Huang, Caroline B., Physiology
Huber, Martin E., Phys/State
Keating, Kevin P., Math/Algbr
Kirchhofer, Brad A., E/Chemical
Knessl, Charles, Math/Apps
Larson, Eric M., Economics
Milette, Jill J., Physiology
Neumark, David B., Economics
Penick, Michael A., Economics
Reck, Brian H., Geology
Sachs, Jeffrey R., Math/Apps
Sault, Allen G., E/Chemical
Serenio, Juan A., Psych/Exp
Stathopoulos, Victoria, Pharmacol
Walter, Charles H., Math/Algbr
Watkins, Margaret B., Microbiol
White, Susan M., E/Mechancs
Yeh Lisa, I-Ching, Chemphyscl

INDIANA

Anderson, Glenn D., Psych/Exp
Bawendi, Moungi G., Chemphyscl
Blair, Patricia L., Fish&Wild
Ewbank, Edward L., E/Chemical
Feldman, Pamela L., Anthrpology
Harris, Robert M., E/Electrcl
Hollanberg, William B., Chem/Inorg
Kenney, John B., E/Electrcl
Kuo, Scot C., Biochem

Loewenberg, Michael, E/Chemical
Papke, Leslie E., Economics
Schutt, James A., E/Mechancl
Wiebe, Douglas J., Math/Cmptr

IOWA

Anklam, William J., E/Electrc
Bovenmyer, Anne E., Psych/Dev
Buchheim, Martin P., Bio/Env Sc
Hale, Charles R., Anthropology
Hill, Jeffrey R., Chemphyscl
Peterson, Andrew S., Pathology
Prokop, Larry J., Psychometr
Ward, Jeffrey J., Anthropology

KANSAS

Carpenter, John E., Chemphyscl
Hillis, David M., Zoology
Roth, Bradley J., Biophysics
Smith, Kenneth C., Med Sci

KENTUCKY

Barton, Keith C., Anthropology
Dobyns, York H., Theor Phys
Horning, Bruce C., Economics
Thomas, Deborah A., Pharmacol
VanDevanter, Donald R., Pharmacol
Vater, Sarah T., Pharmacol

LOUISIANA

Clary, David W., E/Chemical
Do, Son T., Biochem

MAINE

Baker, Ralph S., Soil Sci
Michalka, Timothy L., E/Electrc
Soley, Richard Mark, Math/Cmptr

MARYLAND

Boppa, Ravi B., Math/Cmptr
Clayton, Susan D., Psych/Socl
Deadrick, Douglas S., E/Electrc
Gordon, Michael E., Bio/Engr
Humpal, John J., Psych/Exp
Hunt, Brian R., Math/Analy
Kirkland, Anne M., E/Electron
Milly, Deborah J., Polit Sci
Saliba, Samira R., Psych/Exp
Sherry, David H., E/Chemical
Smith, Geoffrey S., Math/Cmptr
Waldmann, Robert J., Molec Biol
Young, Michael W., Math/Cmptr

MASSACHUSETTS

Barrington, David A., Math/Topol
Benoit, Gaboury, Geochem
Burnley, Pamela C., Geology
Dabek, Nina B., Linguistics
Fleck, Margaret M., Math/Cmptr
Kosower, David A., Theor Phys
Leape, Jonathan I., Economics
Levoy, Nancy F., E/Material
Montana David J., Math/Apps
Pires, Anthony, Biology
Pollock, Steven J., Phys/Part
Root, Leslie J., Chemphyscl
Rowe, Jamis M., Biology
Schmidt, John W., Pharmacol
Schwartz, Jeffrey P., E/Chemical
Stephens, Stuart K., Geophysics
Summers, Richard G. Jr, Biochem

Tscmidcs, Theodore, Chem/Orgnc
Vaughan, Anne W., Geochem

MICHIGAN

Bermann, Marc P., Archeology
Bishop, Christopher J., Math/Analy
Ciarelli, Diane L., E/Mechancl
Duluk, Jerome F. Jr, E/Electrc
Eisenstadt, Sharon R., Math/Cmptr
Eltinge, John L., Math/Stats
Griffiths, William K., Intl Relat
Hunter, Kam D., Physiology
Jussim, Lee J., Psych/Socl
Knoll, Thomas F., E/Electron
Kraus, Jennifer E., Genetics
Liepa, Mark A., E/Chemical
Luh, Karen E., Psych/Exp
MacKie-Mason, Jeffrey K., Economics
Milgroom, Michael G., Ecology
Osenberg, Craig W., Ecology
Overbeck, Joseph E., E/Material
Romani, Paul N., Atmos Sci
Slot, Larry L., Microbiol
Stocking, Edward C., Math/Algbr
Walsh, Cecilia A., Chemphyscl
Weaver, David R., Zoology
Wolf, Charlotte C., Biochem
Zorn, Benjamin G., Math/Cmptr

MINNESOTA

Armson, Rossana R., Sociology
Curran, Stephen J., Math/Algbr
Domian, Dale L., Economics
Geller, William, Math/Apps
Hartman, Neil R., Pharmacol
Jackson, Michael J., Geophysics
Konopliv, Alexander S., E/Aeronaut
Moller, James C., E/Mechancl
Ojakangas, Gregory W., Geophysics
Pavlik, Claire E., Geog/Nphys
Rumpel, Catherine M., Microbiol
Strand, Steven R., E/Chemical

MISSOURI

Ahrens, Anthony H., Psych/Pers
AusterBerry, Charles F., Genetics
Dahmer, Mark L., Agronomy
Davis, Scott K., Genetics
Gross, Mark W., Med Sci
Helman, James L., Phys/State
Horst, William D., E/Civil
Jackson, James M., E/Mechancl
Mangelsdorf, Steve T., E/Electrc
Shayer, Nancy, Psych/Socl

MONTANA

Davidson, Eric A., Forestry
Ritter, Mark B., Phys/State

NEBRASKA

White, Kenneth M., Chemphyscl

NEW HAMPSHIRE

McFadden, Catherine S., Ecology

NEW JERSEY

Ascoli, Edward P., E/Chemical
Brantley, Susan L., Geochem
Burrows, Veronica A., E/Chemical
Devoe, Nora N., Forestry

Dritschel, David G., Atmos Sci
Jandra, Thomas P., E/Chemical
Harker, Patrick T., E/Civil
Helble, Joseph J., E/Chemical
Herbert, Timothy D., Geology
Jensen, Cynthia L., Ecology
Joback, Kevin G., E/Chemical
Laraia, Vincent J., Metallurgy
Lewellen, David C., Theor Phys
Liu, Karen, Phys/Optic
Moore, Greg, Theor Phys
Psiaki, Mark L., E/Mechancl
Romano, Joseph P., Math/Stats
Singer, Bart A., E/Mechancl
Stokes, Susan C., Anthropolgy
Ullman, David S., Oceanography
VanCleve, Jeffrey E., Phys/State
Whitman, Malcolm R., Molec Biol
Wolfe, Nicola, Psychology
Zemsky-Zusman, Susan, Genetics

NEW MEXICO

Hirschfeld, Rafael, Math/Cmptr

NEW YORK

Belsky, Stephen D., Botany
Blohm, Margaret L., Chem/Inorg
Bornbusch, Alan H., Zoology
Boylan, Ross D., Sociology
Brubaker, William R., Sociology
Bryon, Tamsen R., Anthropology
Burke, William J., E/Civil
Burley, William R., Math/Cmptr
Cain, John J., E/Chemical
Chow, Catherine M., Biology
Chow, George C., Genetics
Cohn, Evan R., Math/Cmptr
Colapietro, Jennifer, Math/Apps
Conolly, Steven M., E/Electrc
Copeland, Constance S., Microbiol
Coyne, Robert S., Biology
Eskridge, Etta M., Cell Biol
Fitchen, John H., Botany
Gertner, Robert H., Economics
Golding, Andrew R., Math/Cmptr
Goldstein, Richard A., Physics
Graves, Deborah D., Chem/Orgnc
Grosos, David H., Physiology
Hall, Peter C., Geology
Heinzed, Barbara J., Geog/Nphys
Heisler, Julia, Astronomy
Hemachandra, Lane A., Math/Cmptr
Hirtle, Beverly J., Economics
Jessup, David A., Archeology
Kautz, Henry A., Math/Cmptr
Lajtha, Kathryn, Ecology
Lenchner, Jonathan, Math/Apps
Lew, Roger R., Botany
Lewis, Gifford J., E/Mechancl
Lucas, Joan M., Math/Cmptr
MacWilliams, Kenneth P., E/Electron
Miller, Randall J., E/Nuclear
Nwuman-de-Vegvar, Henry, Molec Biol
Poy, Florence W., E/Mechanics
Rabe, Karin M., Phys/State
Rokhsar, Daniel S., Physics
Rose, Ralph W., Urb&Reg Pl
Rosenbaum, Jeffrey Marc, Geochem
Salyards, Stephen L., Geophysics
Schwartz, Andrew D., Math/Analy
Shepard, Thomas D., E/Electrc
Sher, David B., Math/Cmptr
Smith, David L., Geology

Solomon, Mark J., Biochem
 Spengel, David N., Astronomy
 Studebaker, Mark D., E/Electrc
 Sussman, Alan L., Math/Cmptr
 Wanuga, Thomas S., Math/Cmptr
 Weinberg, Susan M., Ecology
 Wertheimer, Jeremy M., Math/Cmptr
 Wittenberg, David K., Math/Cmptr
 Wu, Eva, E/Electrc
 Zuckerman, Rebekah S., Genetics

NORTH CAROLINA

Bent, Brian E., Chemphyscl
 Caspar, Timothy, Botany
 Cutter, Deborah L., Microbiol
 DeLyon, Terence J., Phys/State
 Dexter, Charles M., Microbiol
 Elkins, David B., Microbiol
 Kremen, Claire, Biology
 Loudon, Catherine, Biophysics
 McEvily, Arthur J., Biochem
 Memory, Margaret C., Math/Apps
 Murphy, George L., Microbiol
 Newton, Thomas D., Math/Cmptr
 Patterson, Richard B., Molec Biol
 White, John N., E/Electrc
 Wilusz, Jeffrey, Microbiol

OHIO

Anderson, David J., Ecology
 Berry, Shawn C., Molec Biol
 Berthold, Deborah A., Biochem
 Bils, Mark J., Economics
 Chen, Peter, Chem/Orgnc
 Craig, Julia A., Chem/Inorg
 Del Paggio, Alan A., Chem/Inorg
 Ford, Donna I., Botany
 Johnson, Diana D., E/Electrc
 Jones, Brian K., Theor Phys
 Laughlin, Kenneth B., Chemphyscl
 Lavin, Dane E., Psych/Exp
 Maciejewski, Anthony A., E/Electrc
 McNeal, Daniel R., Theor Phys
 Morilak, David A., Med Sci
 Mueller, Paul R., Theor Phys
 Planeaux, James B., E/Chemical
 Pope, Susan L., Economics
 Ross, Robert J., Chem/Orgnc
 Shoemaker, Kevin R., Biochem
 Smith, Tara L., Math/Algbr
 Sponsler, Michael B., Chem/Orgnc

OKLAHOMA

Kohler, Gary D., Phys/Part
 Vander, Heyden William, E/Chemical

OREGON

Anderson, Dirk M., Phytopath
 Green, Laura S., Biology
 Gronke, Paul W., Polit Sci
 Miller, Cary J., Chemphyscl
 Olds, Eric P., Geochem
 Strange, William C., Economics

PENNSYLVANIA

An, Chae H., E/Electrc
 Chilcote, Amy M., Anthropolgy
 Dunn, Stephen N., Molec Biol
 Feild, Alexander R., E/Mechanc
 Gilens, Martin I., Sociology
 Giunta, Carmen J., Chemphyscl
 Gluck, Mark A., Psych/Exp
 Gornick, Lisa K., Psych/Pers
 Hiebert, Sara M., Zoology
 Humphrey, John D., Geology
 Kelly, Michael H., Psych/Dev
 Mack, Alison J., Botany
 Mattucci, Linda C., Pharmacol
 McCarthy, James K., Astronomy
 McClure, Laurel A., Polit Sci
 McGuire, Anne M., Psych/Socl
 McKinnon, Julian T. Jr, E/Chemical
 Morrison, Philip Jr, E/Chemical
 Palowitch, Bernard L. Jr, E/Chemical
 Pearlstein, Larry A., E/Electrc
 Pfeffer, Richard C., Pharmacol
 Postrel, Steven R., Economics
 Ruder, Michal E., Geophysics
 Ruffing, Nancy A., Physiology
 Salowe, Scott P., Biochem
 Scheirer, Heidi L., Geophysics
 Schuerger, Margaret J., Economics
 Shelhamer, Mark J., Bio/Engr
 Shipley, Thomas F., Psych/Exp
 Spector, David A., Zoology
 Staudt, Barbara J., Math/Cmptr
 Toth, Matthew J., Molec Biol
 Yost, Scott A., Phys/Part

RHODE ISLAND

Barrette, Ernie-Paul, Chem/Orgnc
 Nelson, David D., Chemphyscl

SOUTH CAROLINA

Allmon, Warren D., Paleontlgy
 Blackburn, McKinley L., Economics
 Hucks, Joseph C., E/Electrc

SOUTH DAKOTA

Engh, Richard A., Chemphyscl

TENNESSEE

Beck, Warren F., Chemphyscl
 Cleaveland, Walter R. II, Math/Cmptr
 Cobb, Jeffrey E., Chem/Orgnc
 Jaynes, Mary L., Bio/Env Sc
 Parchment, Ralph E., Pharmacol
 Perdue, Donna O., Botany
 Sluder, Ann E., Biochem
 Wilson, Sanford L., Phys/Part

TEXAS

Bretscher, Kathryn R., Chem/Inorg
 Brown, Jeffrey K., Chemphyscl
 Bryan, Charles R., Geology
 Hilton, James L., Psych/Socl

Hythecker, Velma G., Psych/Exp
 Jones, Karin L., Archeology
 Liescheski, Phillip B., Chemphyscl
 Lobban, Lance L., E/Chemical
 Stewart, Edwin S., Botany

UTAH

Clark, James D., Chem/Orgnc
 Hales, Thomas C., Math/Geom
 Jew, Susan N., Chem/Orgnc
 Winkler, Andrew M., Math/Analy

VIRGINIA

Bickers, Nelson E. Jr, Phys/State
 De Long, Alison, Biology
 Epstein, Charles B., Biology
 Foster, Harry L., Economics
 Hegmon, Michelle M., Archeology
 Lambert, Millard H., Biophysics
 Lawler, John V., E/Chemical
 Pechura, Constance C., Physiology
 Polik, William F., Chemphyscl
 Richter, Lee J., Phys/State
 Santos, Jane M., Microbiol
 Schatz, Peter J., Molec Biol
 Suben, Judith G., Psychology
 VandeWoude, Susan J., Biochem

WASHINGTON

Allen, Sally A., Anthropology
 Ball, Amy O., Biochem
 Brown, Megan T., Molec Biol
 Burnham, Robyn J., Paleontlgy
 Fowler, Paul J., Geophysics
 Gorham, Lucy S., Urb&Reg Pl
 Hayden, Martha C., Genetics
 Hill, Brian R., Theor Phys
 Kelemen, Peter B., Geology
 Mihalik, Linda A., E/Chemical
 Newlin, Matthew P., E/Mechanc
 Robinson, Elizabeth M., Geophysics
 Simpson, Ralph David, Economics

WEST VIRGINIA

Hurlbutt, Bethia L., Zoology

WISCONSIN

Alexander, Michael A., E/Chemical
 Allen, Theodore J., Theor Phys
 Bauers, Kimberly A., Psych/Exp
 Goodspeed, David C., Pathology
 Hoopes, Elizabeth J., Economics
 Katz, Donald B., Botany
 Pigg, Stacy L., Anthropology
 Rathmann, Peter K., Math/Cmptr
 Roesselet, Kevin J., Chem/Inorg
 Silverstein, Judith, Genetics
 Skelton, Shaun M., E/Electrc
 Soltvedt, Brook C., Molec Biol
 Weber, Ann E., Chem/Orgnc

WYOMING

Meyer, David G., E/Electrc

Individuals Offered Minority Graduate Fellowships (by state of permanent residence and field of study)

ARIZONA

Pineda, Andrew C., Chemphyscl
Quidera, Juanita, Agricultur

CALIFORNIA

Alatorre, Sylvia M., Psych/Dev
Carr, Foster P., Biochem
Dawson, Michael C., Polit Sci
Laroco, Leonardo A. Jr, Math/Anal
Revilla, Linda A., Psych/Dev
Trejo, Stephen J., Economics
Ulibarri, Catherine M., Biology
Zepeda, Ricardo G., Geology

CONNECTICUT

Garcia, Michael R., Astronomy

ILLINOIS

Brookins, Craig Calvert, Psychology
Molina, Gerardo H., E/Electrl
Muhammad, Fuad U., Phys/State
Walker, Patricia L., Economics

INDIANA

Bande, Ramla, Urb&Reg Pl
Morris, Sonya Elaine, Microbiol

KANSAS

Lira, Carl T., E/Chemical

MARYLAND

Fairley, Sharon Renee, E/Mechanc
Jacobs, Eugenia T., Psych/Exp

MICHIGAN

Hylton, Keith N., Economics
Ruiz, Joseph C., Molec Biol

MINNESOTA

Barnett, Vincent A., Biochem
Kirven, Melissa J., Nutrition

MISSOURI

Williams, Sherilyn C., Geology

NEVADA

Martinez, Jease D., Molec Biol

NEW JERSEY

Vaughn, Craig B., E/Chemical

NEW MEXICO

Martel, Elaine C., Zoology

NEW YORK

Falcon, Luis M., Sociology
Marshall, Shelley E., E/Electrl
Purcell, Sherill L., Biochem
Silagan, Marciana F., Anthropology

NORTH CAROLINA

Pryor, Pamela D., Psychology

OHIO

Graham, Nathan, E/Mechanc
Morris, Augustus Jr, Bio/Engr

PENNSYLVANIA

Hernandez, Pedro Emilio, Chem/Orgnc
Shannon, Janet H., Sociology
Swann, Lauren E., Nutrition
Wilson, William L., Chemphyscl

PUERTO RICO

Acevedo, Larisa D., Zoology
Betancourt-Pamies, S. V., Microbiol
Cordero-Brana, Minerva, Math/Apps
Rivera, Daniel Eduardo, E/Chemical
Singmaster, Karen A., Chemphyscl

SOUTH CAROLINA

Roache, Rita J., Intl Relat

TENNESSEE

Smith, John B., Psych/Dev

TEXAS

Aguilera, Renato J., Microbiol
Castro, Albino, E/Chemical
Freeman, Donald Gary, Economics
Latorre, Lucia, Nutrition
Saenz, Delia S., Psych/Socl
Sanchez, Fernando, Archeology

UTAH

Luna, David M., E/Chemical

VIRGINIA

Baez, John C., Math/Anal
Ortiz, John E., E/Mechanc

INSTITUTION GLOSSARY*

UNITED STATES

Alabama

Auburn University
Auburn Univ Main Campus
Birmingham
U of Ala in Birmingham
Huntsville
U of Ala in Huntsville
Mobile
Univ of South Alabama
Normal
Alabama A & M University
Talladega
Talladega Col
Tuskegee
Tuskegee Institute
University
University of Alabama

Alaska

Fairbanks
Univ of Alaska-Fairbanks

Arizona

Flagstaff
Lowell Observatory
Museum of Northern Ariz
Northern Ariz Univ
Sacaton
Amerind Agrotech Lab
Tempe
Arizona State University
Tucson
Cerro Tololo Int-Am Obser
Kitt Peak Nat Observatory
Lightning Loc & Prot Inc
University of Arizona

Arkansas

Fayetteville
U-Arkansas Fayetteville
Little Rock
U-Arkansas Little Rock
U-Arkansas Med Scis Campus
State University
Arkansas St U Main Campus

California

Arcata
Humboldt State University
Bakersfield
Cal St Col at Bakersfield
Berkeley
Assn of Bay Area Govt
California Publ Hlth Fdn
Cyclotomics Inc

Earthquake Eng Res Inst
Lawrence Berkeley Lab
Math Sci Res Inst Inc
Physical Dynamics Inc
Berkeley Research Assoc
Relational Technology Inc
Structural Software Dev
Univ of Cal System Office
Univ of Cal-Berkeley
Bodega Bay
Univ of Cal-Berkeley
Chico
Cal State Univ Chico
China Lake
Naval Weapons Center
Claremont
Claremont Graduate School
Harvey Mudd Col
Pomona Col
Costa Mesa
Spectron Develop Labs Inc
Davis
Univ of California-Davis
Duarte
Phrasor Scientific Inc
Durante
City of Hope Res Inst
El Segundo
Agabian Associates
Melvyn Green & Associates
Emeryville
Wiss Janney Elstner & Assoc
Fairfield
Enbio Inc
Floater
Soc Archaeological Scis
Fresno
Cal State Univ Fresno
Fullerton
Cal St Univ Fullerton
Goleta
Neushul Mariculture Inc
Hawthorne
Florod Corporation
Inglewood
Northrop University
Irvine
Energy&Envrnmntl Rsch Corp
Univ of Cal-Irvine
Kentfield
Tacticon Corporation
Laguna Beach
Laguna Research Lab
Laguna Hills
Sparta Systems Inc
La Jolla
Agouron Institute
La Jolla Cancer Res Fdn
La Jolla Institute

S-Cubed
Univ of Cal San Diego
Univ of Cal San Diego
Revelle College
Long Beach
Cal St Univ Long Beach
Los Angeles
Aerospace Corporation
Cal St Univ Los Angeles
Dames & Moore
Occidental Col
S B Barnes & Associates
Univ of Cal-Los Angeles
Univ of Southern Cal
Malibu
Earth Science Res Corp
Menlo Park
Sri International
Mission Viejo
Saddleback Comm College
Moffett Field
Nasa,
Ames Research Ctr
Monterey
Monterey Inst Res Astron
Naval Postgraduate School
Mt Hamilton
Univ of Cal-Santa Cruz
Northridge
Cal St Univ Northridge
Oakland
Mills College
Palo Alto
Applied Technology Council
Integrated Sysms-Cal
Linus Pauling Inst Sci&Md
Lockheed Palo Alto Reslab
Synergistic Devel Assoc
Pasadena
Aerovironment Inc
California Inst of Tech
Jet Propulsion Laboratory
Southwest Innovation Grp
Tetra Tech Inc
Vestar Research Inc
Pomona
Cal St Poly Univ Pomona
Portola Valley
William Spangle & Assoc
Redlands
Merritt Cases Inc
University of Redlands
Redondo Beach
J H Wiggins Company
Trw Inc-Redondo Beach
Redwood City
Scientific Service Inc

Riverside

Ruhnau, Evans, Ruhnau Assoc
Univ of Cal-Riverside

Sacramento

Cal Dept of Hlth Services
Cal State Univ Sacramento
Engineering Computer Corp

San Diego

Aquaculture Sysms Intl
Compass Systems Inc
Helicon Foundation
Hubbs-Sea World Res Inst
Salk Inst Biol Studies
San Diego Hall of Science
San Diego Soc Nat History
San Diego State Univ

San Francisco

Building Systems Dev Inc
Cal Acad of Sciences
Ege Inc
H J Degenkolb Assocs Engr
John A Blume and Assocs
San Francisco State Univ
Univ of Cal-San Francisco
Univ of San Francisco
Woodward-Clyde Consul Inc

San Jose

Int Bus Machines Corp
San Jose Res Laboratory
San Jose State University

San Luis Obispo

Cal St U San Luis Obispo

San Mateo

Charles Evans & Assocs

Santa Ana

Santa Ana College

Santa Barbara

Mission Research Corp
Univ of Cal Santa Barbara

Santa Clara

University of Santa Clara

Santa Cruz

Univ of Cal-Santa Cruz

Santa Monica

Inst For Policy & Mgmt Res
Rand Corporation

Stanford

Ctr Adv Study Behav Sci
Stanford Univ

Stinson Beach

Point Reyes Bird Observ

Stockton

Univ of the Pacific

Sunnyvale

Advanced Res & Applic Corp
Lockheed Mis & Spa Co Inc
Machine Intelligence Corp
Symantec

* Note: The term "floater," used throughout this glossary, refers to an institution that has a different director or head (and thus a different address) each year.

Thousand Oaks

Amer Soc of Zoologists
Rockwell International

Torrance

Dynamics Technology Inc
Research & Educ Inst Inc

Woodland Hills

Perceptronics Inc

Colorado**Aspen**

Aspen Center For Physics

Boulder

Atkinson-Noland&Assoc Inc
Geological Soc of America
Nat Ctr For Atmos Res
Nat'l Oceanic Atmos Admin
Environ Research Lab
Nat'l Oceanic Atmos Admin
Geophy&Slr-Terr Data Ctr

Trendtrack Company

Univ Colorado at Boulder

Colorado Springs

Colorado College

Crested Butte

Rocky Mtn Biol Lab

Denver

E Roosevelt Ins Cancr Res
Nat Jewish Hosp & Res Ctr
Nat'l Conf State Legisltrs
Univ of Colo at Denver
Univ of Colo Hlth Sci Ctr
University of Denver

Durango

Fort Lewis College

Floater

Rocky Mtn Math Consortium

Fort Collins

Colorado State University
Research Inst of Colorado
Simons - Li & Assocs Inc

Golden

Colorado School of Mines

Lakewood

Amer Cancer Res Ctr & Hos
Coury & Associates Inc

Connecticut**Bridgeport**

Sacred Heart Univ
University of Bridgeport

East Hartford

Advanced Fuel Research

Fairfield

Fairfield Univ

Groton

University of Connecticut

Hamden

Quinnipiac College

Hartford

Crt Greater Hartford Inc
Ctr For Envrnment & Man
Hartford Graduate Ctr
Trinity College

Middletown

Wesleyan Univ

New Canaan

Russ Kinne Inc

Siam Inst For Math & Soc

New Haven

Yale University

Noank

University of Connecticut

Storrs

University of Connecticut

Weston

Simco Inc

Delaware**Lewes**

Univ of Delaware
College of Marine Studies

Newark

Franklin Inst
Bartol Research Found
Univ of Delaware

District of Columbia

Amer Assoc For Advt Sci
American Chemical Soc
Amer Council on Education
Amer Geophysical Union
Amer Inst of Architects
Amer Political Sci Assoc
Amer Psychological Assoc
Amer Sociological Assoc
Amer Statistical Assoc
American University
Antioch School of Law
Assn For Women in Math
Assoc of Amer Geographers
Assoc Univ Inc
Brookings Institution
Bureau of Labor Stat
Carnegie Inst of Wash
Catholic Univ of America
Center For Applied Ling
Conf Bd of the Math Sci
Courtesy Travel Service
Creative Presentations
Department of Air Force
Department of Defense
Department of Interior
Department of Navy
Naval Facil & Eng Command
Department of Navy
Navsea Systems Command
Department of State
Dept of Transportation
U S Coast Guard
Exec Off of the President
Office of Mgmt & Budget
George Washington Univ
Georgetown University
Howard University
Joel Popkin & Company
Library of Congress
Linguistic Soc of America
Moshman Associates Inc
Nasa
Nat Acad of Sciences
Nat Acad of Sciences
Nat Research Council
Nat Planning Assoc
Nat Science Tchrs Assoc
National Governors' Assn
National Governors' Assn
Council St Plng Agencies
Nati Cen For Resrc Rc Inc
Patent Office
Public Technology Inc
Smithsonian Institution
Soils Science Soc of Amer

U of DC Central Office
Urban Institute

Florida

Big Pine Key
Newfound Harbor Mar Inst

Boca Raton

Florida Atlantic Univ

Coral Gables

University of Miami

Dania

Nova University

Gainesville

Fla Department of Agr
University of Florida

Miami

Barry College
Fairchild Tropical Garden
Fla International Univ
University of Miami

Orlando

Applied Technology Assoc
Univ of Central Florida

Sarasota

Marie Selby Botan Gardens
University of South Fla
Marine Science Institute

St Petersburg

State Univ Sys of Fla Off

Tallahassee

Fla Department of Agr
Florida A&M University
Florida State University
Tall Timbers Res Inc

Tampa

Florida Innovation Group
University of South Fla

Georgia**Athens**

Univ of Ga Research Fdn
University of Georgia

Atlanta

Atlanta University
Emory University
Ga Inst Tech Main Campus
Georgia State University
Ion Technology Inc
Millimeter Wave Tech Inc
Morehouse College

Augusta

Med Col Ga Res Inst Inc
Medical Col of Georgia

Carrollton

West Georgia College

Decatur

Agnes Scott Col
Savannah

Skidaway Inst of Oceanogr

Statesboro

Georgia Southern College

Hawaii**Honolulu**

Bernice P Bishop Museum
Ctr Cult&Tech Interchange
Ctr Cult&Tech Interchange
East-West Ctr Commun Inst
Univ of Hawaii-Manoa
Univ of Hawaii-Manoa
Honolulu Comm Col

Kailua

Seaco Inc

Kakuku

Kahuku Prann Company Inc
Waimanalo
Oceanic Institute

Idaho**Boise**

Boise State University
Moscow
University of Idaho

Illinois**Argonne**

Argonne National Lab

Batavia

Fermi Natl Accelerator Lab

Cahokia

B C Leather Company

Carbondale

Southern Ill U-Carbondale

Champaign

Parkland College

Charleston

Eastern Illinois Univ

Chicago

Amer Inst Indian Studies
American Col of Radiology
American Planning Assn
Depaul University
East Asian His of Sci Inc
Field Museum of Natl Hist
IIT Research Institute
Illinois Inst of Tech
Loyola Univ of Chicago
Market Facts Inc
Natl Opinion Research Ctr
Northwestern University
Chicago Campus

Rush-Pres St Luke Med Ctr
Scanning Elect Microscopy
Univ of Ill Med Ctr Chgo
Univ of Illinois-Chgo Cir
University of Chicago

De Kalb

Northern Illinois Univ

Evanston

Northwestern University

Galesburg

Knox College

Macomb

Western Illinois Univ

Maywood

Loyola Univ of Chicago

Rolling Meadows

Gould Inc

Gould Lab-III

Springfield

Ill St Museum

Urbana

Univ of Illinois Sys Off
Univ of Illinois-Urbana

Indiana**Bloomington**

Indiana U Central Sys Off
Indiana Univ-Bloomington

Gary

Indiana Univ, Northwest

Indianapolis

Ind U-Purdue U-Indnpls

Lafayette

Purdue University
Notre Dame
 University of Notre Dame
Richmond
 Earlham College
Terre Haute
 Indiana State University

Iowa

Ames
 Iowa St U of Science&Tech
Cedar Falls
 Univ of Northern Iowa
Des Moines
 Drake Univ
Iowa City
 University of Iowa

Kansas

Kansas City
 Univ of Kansas Med Ctr
Lawrence
 U of Kansas Main Campus
Manhattan
 Kansas State University
Wichita
 Wichita State University

Kentucky

Bowling Green
 Western Kentucky Univ
Lexington
 University of Kentucky
Louisville
 Bellarmine College
 Univ of Louisville
Richmond
 Eastern Kentucky Univ

Louisiana

Baton Rouge
 La St Univ Baton Rouge
 Louisiana State U Sys Off
Chauvin
 La Univs Marine Consortm
Covington
 Tulane University
Lafayette
 Univ of Sthwstn Louisiana
New Orleans
 Corrosion Scs & Tech Inc
 La St Univ Medical Ctr
 Tulane University
 Univ of New Orleans

Maine

Bar Harbor
 Jackson Lab
Kennebunkport
 Sea Run Inc
Lewiston
 Bates College
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 Univ of Maine Orono
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